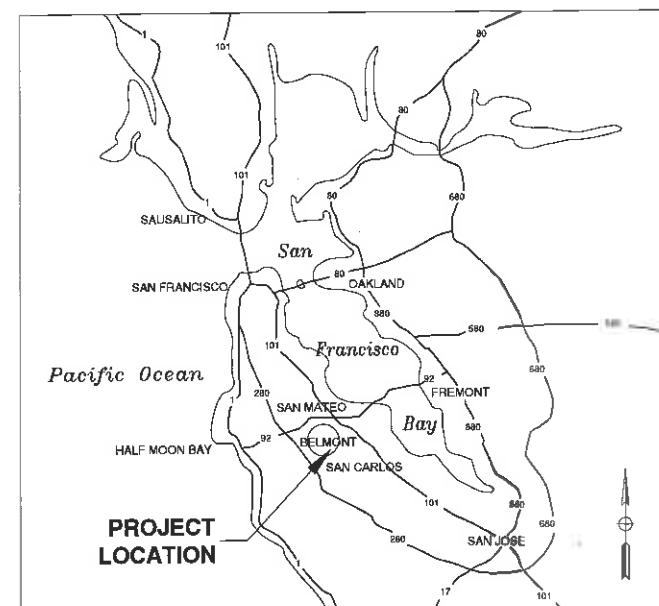


**CITY OF BELMONT**  
SAN MATEO COUNTY, CALIFORNIA  
**2015 SEWER REHABILITATION PROJECT**  
**PIPELINING, PIPE REPLACEMENT, AND**  
**SPOT REPAIRS AT VARIOUS LOCATIONS**

**CITY CONTRACT NUMBER 2015-534**

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**VICINITY MAP**

NO SCALE

<u>CITY COUNCIL</u>	
MAYOR	DAVID BRAUNSTEIN
VICE MAYOR	ERIC REED
COUNCILMEMBER	CATHY WRIGHT
COUNCILMEMBER	CHARLES STONE
COUNCILMEMBER	WARREN LIEBERMAN

<u>STAFF</u>	
CITY MANAGER	GREG SCOLE
DIRECTOR OF PUBLIC WORKS	AFSHIN OSKOUI
CITY ATTORNEY	SCOTT RENNIE
CITY CLERK	TERRI COOK

APPROVED BY CITY COUNCIL ON *MAY 26, 2015*  
AFSHIN OSKOUI - DIRECTOR OF PUBLIC WORKS

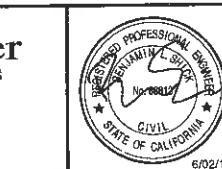


AGENCY INDEX  
BELMONT-SAN CARLOS FIRE (650) 363-4963  
CITY OF BELMONT - PUBLIC WORKS (650) 595-7427  
CITY OF BELMONT - POLICE (650) 595-7400  
AT&T (800) 210-2355  
PACIFIC GAS & ELECTRIC (800) 743-5000  
MID PENINSULA WATER DISTRICT (650) 591-8941  
COMCAST (800) 266-2278  
ALLIED WASTE (650) 592-2411  
SAN MATEO COUNTY TRANSIT DISTRICT (800) 660-4287

NO	REVISIONS	DATE	APPR
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Schaaf & Wheeler  
CONSULTING CIVIL ENGINEERS  
1171 HOMESTEAD RD, STE. 255  
SANTA CLARA, CA 95050  
(408) 246-4848



DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
TITLE SHEET

DATE:	5/29/15	SHEET	1 OF 19
SCALE:	AS SHOWN		
DESIGN:	CLP		
DRAWN:	CLP		
CHECKED:	BLS		

## GENERAL NOTES

- CONTRACTOR SHALL MAINTAIN A COPY OF THE PROJECT PLANS ON THE JOBSITE AT ALL TIMES.
- ALL WORK SHALL CONFORM TO THE PROJECT PLANS AND THE CITY OF BELMONT STANDARD DETAIL DRAWINGS FOR CONSTRUCTION AND OTHER SPECIFICATIONS REFERENCED THEREIN.
- CONTRACTOR SHALL CONDUCT WORK IN ACCORDANCE WITH THE GREENBOOK STANDARD SPECIFICATIONS, CALTRANS STANDARD SPECIFICATIONS, AND CITY'S SPECIFICATIONS.
- NO CHANGE TO THE PROJECT IMPROVEMENT PLANS SHALL BE PERMITTED WITHOUT PRIOR APPROVAL BY THE CITY ENGINEER AND DESIGN ENGINEER.
- CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE CITY AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT TO THE EXTENT ARISING FROM THE SOLE NEGLIGENCE OF THE CITY OR ENGINEER.
- CONTRACTOR SHALL SECURE AN NO FEE ENCROACHMENT PERMIT FROM THE CITY ENGINEERING DEPARTMENT PRIOR TO COMMENCEMENT OF WORK.
- ALL DIMENSIONS AND ELEVATIONS ARE APPROXIMATE AND SHALL NOT BE USED FOR CONSTRUCTION. ELEVATIONS ARE BASED ON DATA PROVIDED BY THE CITY. NO SURVEYING WAS PERFORMED AS PART OF THIS PROJECT. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, PIPE SIZES, MATERIAL, ETC. PRIOR TO CONSTRUCTION.
- IF FIELD ELEVATIONS AND MEASUREMENTS ARE SIGNIFICANTLY DIFFERENT THAN WHAT IS SHOWN ON THE PLANS, CONTRACTOR SHALL NOTIFY THE CITY PRIOR TO PROCEEDING WITH CONSTRUCTION OF THE IMPROVEMENTS. FIELD ADJUSTMENTS MAY BE NECESSARY TO PROVIDE ADEQUATE PIPE SLOPE, PIPE COVER, AND TO CONSTRUCT THE IMPROVEMENTS.
- NOT ALL EXISTING UTILITIES ARE SHOWN ON THE DRAWINGS. THE LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND BASED ON UTILITY MAPS PROVIDED BY THE CITY, AT&T, COMCAST, AND PG&E. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCURATELY LOCATE ALL EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REPORT POTENTIAL CONFLICTS TO THE CITY ENGINEER PRIOR TO EXCAVATING FOR NEW FACILITIES.
- CONTRACTOR SHALL NOTIFY ALL PUBLIC AND PRIVATE UTILITY OWNERS 48 HOURS PRIOR TO COMMENCEMENT OF WORK ADJACENT TO THE UTILITY. CONTACT UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600.
- PROPERTY BOUNDARIES, PROPERTY CORNERS, AND EASEMENTS SHOWN ON THIS SHEET HAVE BEEN PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY AND MAY NOT MATCH RECORDS OF SURVEY. CONTRACTOR SHALL VERIFY PROPERTY AND EASEMENT INFORMATION PRIOR TO BEGINNING ANY WORK OUTSIDE THE RIGHT-OF-WAY.
- THE CONTRACTOR SHALL NOTIFY, BY CIRCULAR, ALL BUSINESS ESTABLISHMENTS AND RESIDENCES LOCATED IN AREAS AFFECTED BY THE WORK ONE WEEK PRIOR TO START OF CONSTRUCTION. AT A MINIMUM, ALL RESIDENTS AND BUSINESS ESTABLISHMENTS WITHIN 100 FEET OF THE WORK AREAS SHALL BE NOTIFIED. A DRAFT OF THE CIRCULAR SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL.
- ALL SURPLUS AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM PUBLIC RIGHT-OF-WAY.
- CONTRACTOR SHALL PROVIDE ADEQUATE DUST CONTROL AND KEEP MUD AND DEBRIS OFF THE PUBLIC RIGHT-OF-WAY AT ALL TIMES.
- ALL TRENCHES AND EXCAVATIONS SHALL BE CONSTRUCTED IN STRICT COMPLIANCE WITH THE APPLICABLE SECTIONS OF CALIFORNIA AND FEDERAL O.S.H.A. REQUIREMENTS AND OTHER APPLICABLE SAFETY ORDINANCES. CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR TRENCH SHORING DESIGN AND INSTALLATION.
- OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT IN THE PUBLIC RIGHT-OF-WAY SHALL NOT BE PERMITTED, EXCEPT AT LOCATION(S) APPROVED BY THE CITY TRAFFIC ENGINEER.
- CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAG MEN, CONES OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY IN ACCORDANCE WITH THE SPECIFICATIONS.
- THE CONTRACTOR SHALL OBTAIN A PERMIT/WATER METER AND BACKFLOW FROM MID-PENINSULA WATER DISTRICT (MPWD) FOR CONSTRUCTION WATER OBTAINED FROM THE CITY HYDRANT, CALL (650) 591-8941, A FEE AND DEPOSIT WILL BE REQUIRED.
- CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL PRIOR TO THE PRE-CONSTRUCTION MEETING AS SPECIFIED IN SPECIFICATION SECTION 01120-1.08.
- LANE CLOSURE ON RALSTON AVE IS ALLOWED BETWEEN 9 AM AND 3 PM ONLY. THROUGH TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.
- CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY. ALL EXCAVATIONS SHALL BE PLATED WITH NON-SKID PLATES WHEN INACTIVE. BARRICADES WITH LIGHTS SHALL DELINEATE CONSTRUCTION ZONE.
- CONTRACTOR SHALL COMPLY WITH BEST MANAGEMENT PRACTICES OF CITY'S NPDES PERMIT FOR PROTECTION OF STORM WATER QUALITY.
- VIDEOS OF THE PIPES TO BE REHABILITATED ARE ON FILE WITH THE DEPARTMENT OF PUBLIC WORKS. THEY ARE AVAILABLE FOR REVIEW PRIOR TO BID SUBMISSION.
- CONTRACTOR SHALL VISIT SITES PRIOR TO SUBMITTING BID. SOME LOCATIONS ARE NOT EASILY ACCESSIBLE.
- NO ADDITIONAL COST WILL BE PAID BY THE CITY FOR CONDITIONS THAT ARE REVEALED IN THE PIPELINE VIDEOS AND SITE VISIT.
- RIM AND INVERT ELEVATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE AND BASED ON UTILITY MAPS PROVIDED BY THE CITY. THE CONTRACTOR SHALL VERIFY EXISTING GRADES AND CONSTRUCT (N) PIPES WITH CONTINUOUS SLOPE BETWEEN (E) MH INVERT ELEVATIONS, UNLESS OTHERWISE NOTED.

## GENERAL NOTES (CONTINUED)

- STATIONING IS BASED ON STRAIGHT HORIZONTAL DISTANCES FROM CENTER OF MANHOLES. LATERAL LOCATIONS ARE INDICATED LOOKING UP STATION (W/ INCREASING VALUES).
- CONTRACTOR SHALL CONFIRM ALL LATERAL LOCATIONS PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE RESIDENTS NOTICE OF ANY SEWER SHUT DOWNS IN ACCORDANCE WITH SPECIFICATION SECTION 01120-1.07.
- SEWERS TO BE REPLACED USING TRENCHED METHODS SHALL HAVE LATERAL CONNECTIONS REPLACED PER DETAIL 5 ON SHEET 19. ABANDON CAPPED LATERALS. REFER TO ADDITIONAL NOTES ON THIS SHEET FOR PIPE LINING.
- SEWER SERVICE SHALL BE RESTORED BEFORE THE END OF EACH WORKING DAY. REFER TO SPECIFICATION SECTION 01120-1.07 FOR ADDITIONAL INFORMATION.

### WATER SEPARATION

- LOCATIONS WHERE NEW PVC SEWER MAIN IS TO BE CONSTRUCTED MUST MEET THE FOLLOWING REQUIREMENTS WHERE HORIZONTAL SEPARATION WITH THE WATER MAIN IS LESS THAN 10 FEET:
  - LOCATIONS WHERE HORIZONTAL SEWER AND WATER MAIN SEPARATION DISTANCE IS BETWEEN 4 FEET AND 10 FEET: PVC SEWER PIPES SHALL BE INSTALLED WITH RUBBER RING JOINTS.
  - LOCATIONS WHERE HORIZONTAL SEWER AND WATER MAIN SEPARATION DISTANCE IS BETWEEN 1 FEET AND 4 FEET: PVC SEWER PIPES SHALL BE INSTALLED WITH RUBBER RING JOINTS AND TRENCH BACKFILL SHALL BE CDF PER DETAIL 5 ON SHEET 18.
  - LOCATIONS WHERE SEWER CROSSES UNDER WATER MAIN: NOTIFY ENGINEER IF VERTICAL CLEARANCE OF 1 FOOT CANNOT BE ACHIEVED. BACKFILL TRENCH WITH CDF.

### PIPE LINING

- PIPES INDICATED TO BE LINED SHALL BE LINED WITH CURED IN PLACE PIPE PER SPECIFICATION SECTION 02900.
- REPAIR LATERALS: LATERALS INDICATED TO BE REPAIRED SHALL BE REPAIRED PER DETAIL 7 ON SHEET 18 PRIOR TO LINING AND REACTIVATED AFTER LINING SEWER MAIN PER SPECIFICATION SECTION 02900-3.01.
- REINSTATE LATERALS: LATERALS INDICATED TO BE REINSTATED SHALL BE REACTIVATED PER SPECIFICATION SECTION 02900-3.01.
- LATERALS EXTENDING INTO THE SEWER MAIN SHALL BE REPAIRED PRIOR TO INSTALLING CIPP.
- LATERALS THAT THE CONTRACTOR CONFIRMS ARE CAPPED OR INACTIVE, SHALL NOT BE REINSTATED.

### MATERIALS

- ALL DISTURBED PAVEMENT STRIPING AND MARKERS SHALL BE REPLACED BY THE CONTRACTOR. ALL DISTURBED MARKINGS AND STENCILS SHALL BE REPLACED IN FULL. ALL STRIPING, MARKINGS AND STENCILS SHALL BE THERMOPLASTIC. PAVEMENT STRIPING AND MARKINGS SHALL ADHERE TO THE CALTRANS STANDARD SPECIFICATIONS SECTIONS 84 AND 85.

### ARBORIST NOTES AND TREE PRESERVATION

- NO CUTTING OF ANY PART OF PRIVATE OR CITY TREES, INCLUDING ROOTS, SHALL BE DONE WITHOUT SECURING APPROVAL AND DIRECT SUPERVISION FROM THE CITY ARBORIST.
- CONTRACTOR SHALL NOTIFY CITY ARBORIST 72 HOURS IN ADVANCE OF ANY WORK REQUIRING DIGGING AROUND OR WITHIN THE DRIP LINE OF EXISTING TREES.
- NO TRENCHING SHALL BE DONE WITHIN THE DRIP LINE OF EXISTING TREES WITHOUT THE APPROVAL OF THE CITY ARBORIST. OPEN TRENCHING IN THE ROOT ZONE OF A PUBLIC TREE IS PROHIBITED EXCEPT IN CASES WHERE THE TRENCHING FALLS OUTSIDE THE DRIP LINE OF THE TREE INVOLVED. EXCEPTIONS WILL BE ALLOWED IF, IN THE OPINION OF THE CITY ARBORIST, THE IMPACT OF TRENCHING UPON THE TREE WILL BE NEGIGLIGIBLE.
- IF INJURY SHOULD OCCUR TO ANY TREE DURING CONSTRUCTION, IT MUST BE REPORTED TO THE CITY/PROJECT ARBORIST WITHIN 6 HOURS SO THAT APPROPRIATE TREATMENTS CAN BE APPLIED. THE CITY ARBORIST/PROJECT ARBORIST SHALL BE THE SOLE JUDGE OF THE CONDITION OF ANY TREE.
- NO MATERIALS, EQUIPMENT, FUELS, PAINT, SPOIL, WASTE OR WASH-OUT WATER MAY BE DEPOSITED, STORED, OR PARKED WITHIN THE DRIP-LINE OF A TREE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAR VEGETATION AS REQUIRED FOR ACCESS TO THE SITES. NO ADDITIONAL COST SHALL BE PAID BY THE CITY FOR THIS WORK.

### POTHOLING

- THE CONTRACTOR SHALL POTHOLE ALL UTILITIES THAT MAY CONFLICT WITH SEWER ALIGNMENT AS FIRST ORDER OF WORK AND PRIOR TO EXCAVATING AS DESCRIBED BELOW:
  - OPEN TRENCH EXCAVATION LOCATIONS:
    - POTHOLE INFORMATION IS SHOWN ON THE PLANS AND DETAILED IN APPENDIX A OF THE SPECIFICATIONS.
    - CONTRACTOR SHALL POTHOLE ALL UTILITIES THAT MAY CONFLICT WITH THE SEWER ALIGNMENT PRIOR TO EXCAVATING. WATER MAINS PREVIOUSLY POTHOLED BY THE CITY SHALL NOT BE POTHOLED. AT A MINIMUM, THIS INCLUDES ANY UNDERGROUND GAS MAINS, ELECTRICAL, AND FIBER OPTIC CABLE CROSSING THE SEWER.
  - PIPE LINING LOCATIONS:
    - CONTRACTOR SHALL POTHOLE ALL CROSSING UTILITIES IN LOCATIONS WHERE EXCAVATIONS ARE REQUIRED TO REPLACE LATERALS OR PERFORM SPOT REPAIRS.
- SEE TECHNICAL SPECIFICATIONS SECTION 01120-1.03 FOR ADDITIONAL REQUIREMENTS.

## POTHOLE DATA

POTHOLE #	sheet #	utility	size	material	depth to top of pipe
PH 1	13	WATER	6"	CI	27.5"
PH 2	13	WATER	6"	CI	37"
PH 3	13	WATER	6"	CI	38"
PH 4	13	WATER	6"	CI	37"
PH 5	14	WATER	6"	PVC	47"
PH 6	14	WATER	6"	PVC	44"
PH 7	14	WATER	6"	PVC	50"
PH 8	14	WATER	4"	CI	30"
PH 9	14	WATER	4"	CI	30"
PH 10	12	WATER	6"	CI	34"
PH 11	12	WATER	6"	CI	38"
PH 12	10	WATER	6"	CI	28"
PH 14	10	WATER	6"	CI	33"
PH 16	10	WATER	2"	CI	48"
PH 17	8	WATER	6"	CI	27"
PH 18	9	WATER	8"	CI	47"

REFER TO POTHOLE REPORT IN APPENDIX A OF THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

## LEGEND

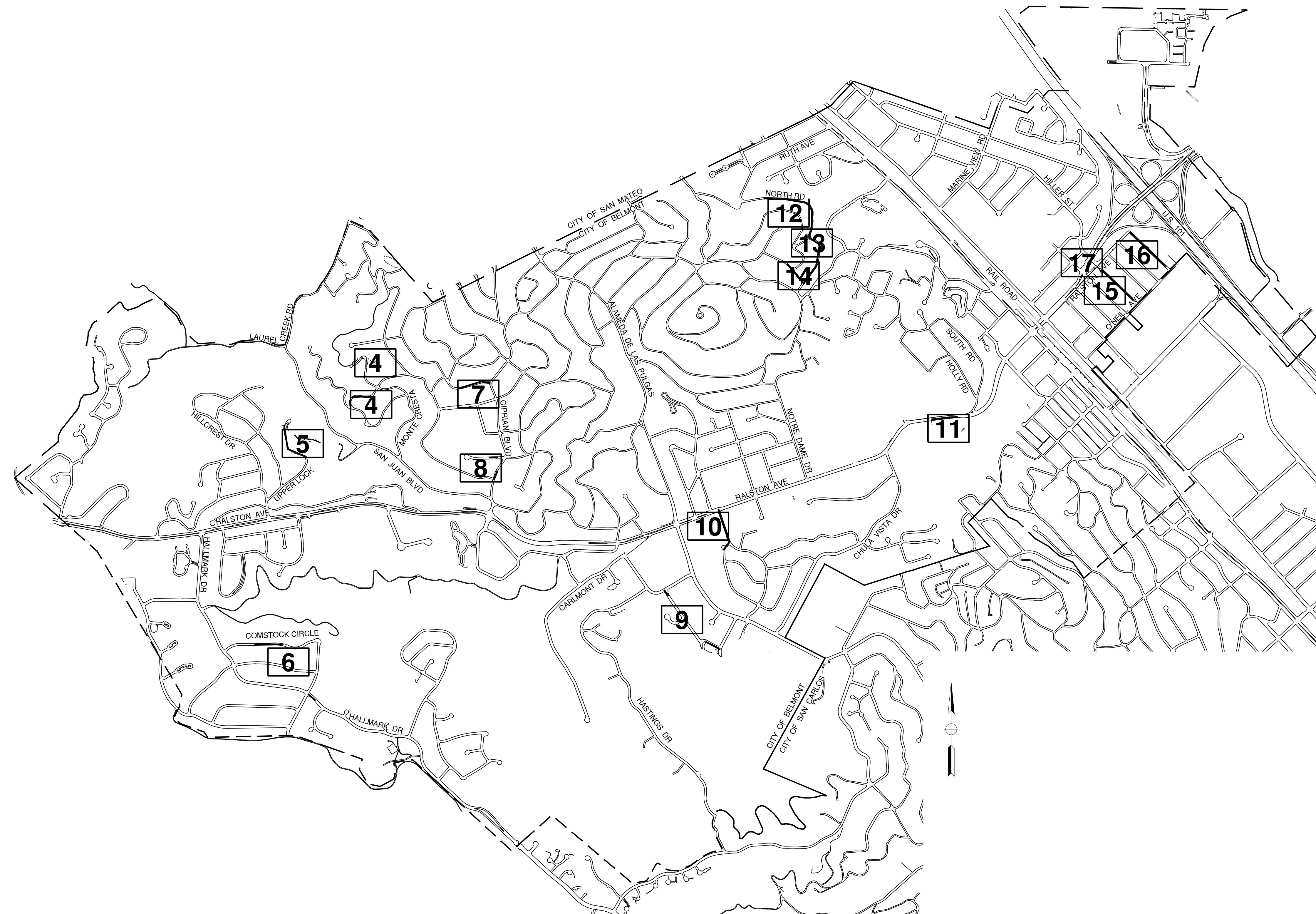
EXISTING	PROPOSED
CONTOUR	
STORM DRAIN	SD
SANITARY SEWER	SS
FORCE MAIN	FM
WATER LINE	W
GAS LINE	GAS
UNDERGROUND ELECTRICAL	UE
UNDERGROUND TELECOMMUNICATION	T
OVERHEAD ELECTRICAL/TELECOMMUNICATION	OHE
EDGE OF PAVEMENT	EP
SIDEWALK / BUILDING	
FENCE	X
SANITARY SEWER MANHOLE	⊖
STORM DRAIN MANHOLE	⊕
STORM DRAIN INLET	☰
WATER VALVE	●
FIRE HYDRANT	○
SURVEY MONUMENT	◎
PROPERTY LINE	
POTHOLE LOCATION	PH #

## ABBREVIATIONS

AB	AGGREGATE BASE	MIN	MINIMUM
ABS	ABSOLUTE	(N)	NEW
AC	ASPHALTIC CONCRETE	N	NORTH
ACP	ASPHALTIC CONCRETE PIPE	NTS	NOT TO SCALE
APPROX	APPROXIMATE	OD	OUTSIDE DIAMETER
APN	ASSESSORS PARCEL NUMBER	PCC	PORTLAND CEMENT CONCRETE
ASPH	ASPHALT	PDWF	PEAK DRY WEATHER FLOW
CB	CATCH BASIN	PH	POTHOLE
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE
CDF	CONTROLLED DENSITY FILL	(P)	PROPOSED
CMP	CORRUGATED METAL PIPE	PUE	PUBLIC UTILITY EASEMENT
CVR	COVER	PWWF	PEAK WET WEATHER FLOW
CI	CAST IRON	Q	FLOW RATE
CIP	CAST IRON PIPE	R	RADIUS
CIPP	CURED IN PLACE PIPE	RCB	REINFORCED CONCRETE BOX
DEG	DEGREE	RCP	REINFORCED CONCRETE PIPE
DIA	DIAMETER	REINF.	REINFORCED, REINFORCING
DIP	DUCTILE IRON PIPE	REL	RELATIVE
DE	DRAINAGE EASEMENT	REQD	REQUIRED
DEPT.	DEPARTMENT	RT.	RIGHT
DO	DOWN STREAM	S	SOUTH
E	EAST	SD	STORM DRAIN
ELEV, EL	ELEVATION	SPCS	SPECIFICATIONS
EXIST, (E)	EXISTING	SS	STAINLESS STEEL, SANITARY SEWER
FL	FLOW LINE	STD	STANDARD
FT	FOOT	SDR	STANDARD DIMENSION RATIO
GND	GROUND	STA	STATION
HDPE	HIGH DENSITY POLYETHYLENE	SD	STORM DRAIN
HORIZ.	HORIZONTAL	SDE	STORM DRAIN EASEMENT
I.D.	INSIDE DIAMETER	TG	TOP GRATE
INV	INVERT	TYP	TYPICAL
L	LENGTH	UP	UP STREAM
LF	LINEAR FOOT	VCP	VITRIFIED CLAY PIPE
LT.	LEFT	VER.	VERTICAL
MH	MANHOLE	W	WEST, WATER
MAX	MAXIMUM	W/	WITH
X-ING	CROSSING		

REVISED WITH POTHOLE DATA

NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
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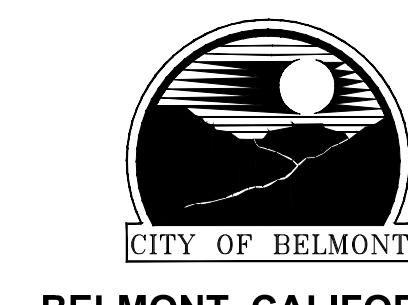


INDEX MAP  
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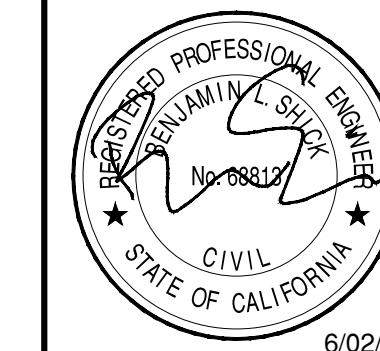
INDEX

TITLE	SHEET NO.
BARCLAY WAY & MONTE CRESTA DR	4
UPPER LOCKE AVE	5
HALLMARK DR & COMSTOCK CIRCLE	6
LINCOLN AVE	7
CIPRIANI BLVD & PONCE AVE	8
GERALDINE WAY & VILLAGE DR	9
MAYWOOD DR & LADERA WAY	10
1300 RALSTON AVE	11
NORTH RD	12
NORTH RD	13
NORTH RD & WILLIAMS AVE	14
HILLER ST	15
KEDITH ST	16
361 RALSTON AVE	17

NO	REVISIONS	DATE	APPR
▲	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
▲	WATER SEPARATION	7/15/15	BLS
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**Schaaf & Wheeler**  
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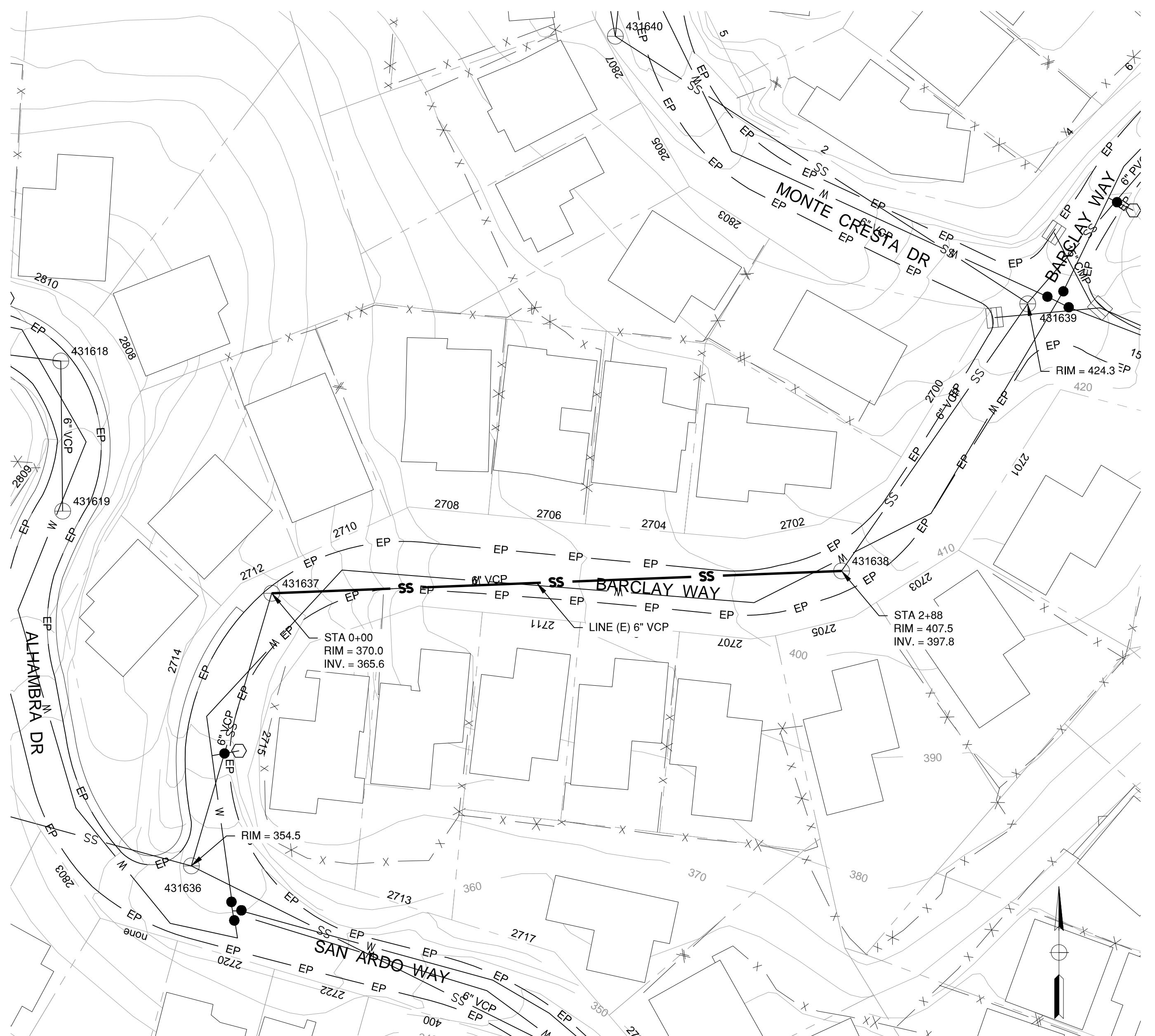
DEPT. OF PUBLIC WORKS CCN 2015-534  
**2015 SEWER  
REHABILITATION PROJECT  
MAP INDEX**

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

**SHEET**  
**3**  
OF  
**19**

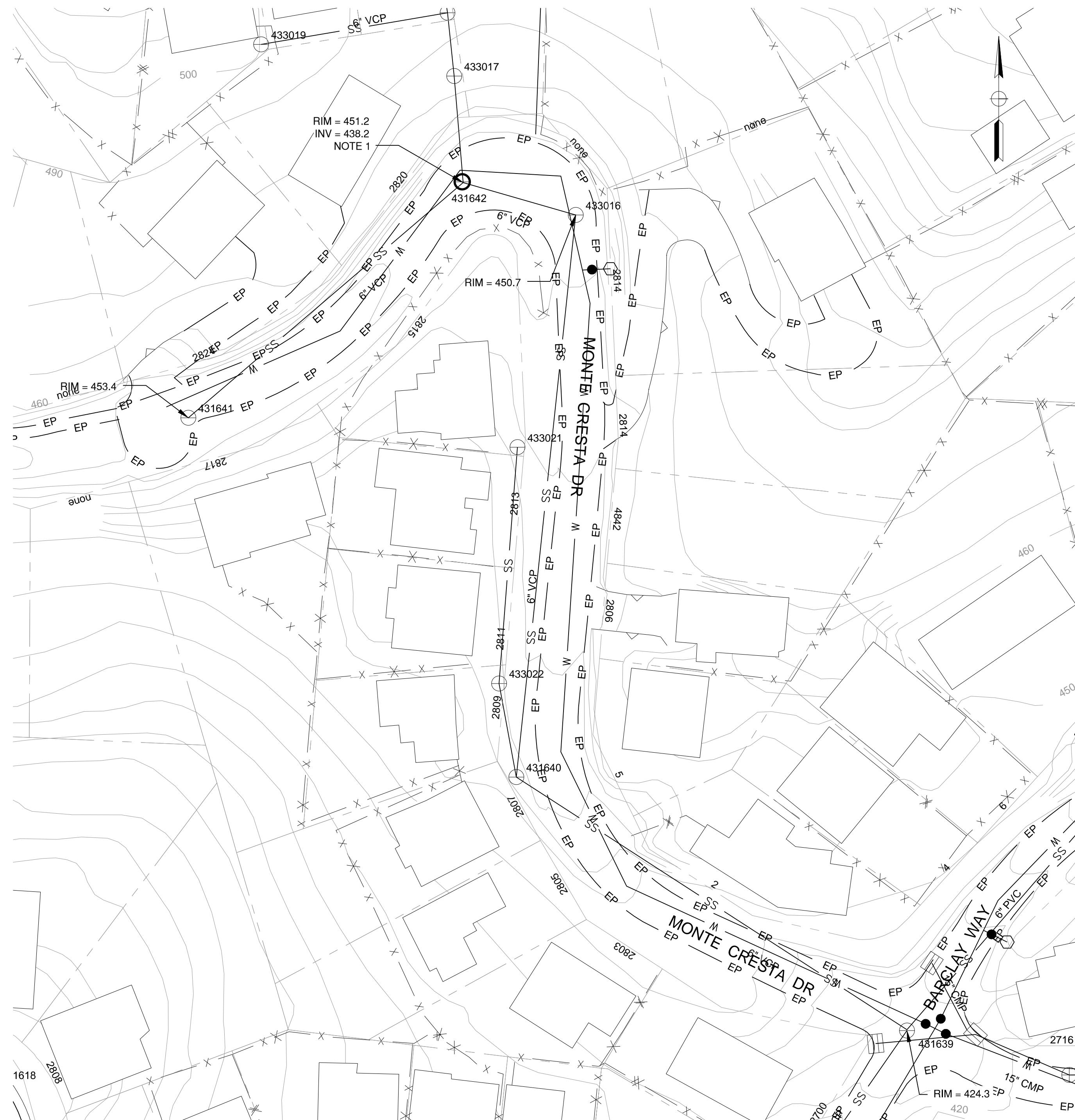
LATERAL LOCATIONS					
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL	NOTES
431638	431637	0+13	LEFT	REINSTATE	
431638	431637	0+58	RIGHT	REPAIR	ROOTS
431638	431637	0+62	LEFT	REPAIR	ROOTS
431638	431637	0+67	LEFT	REPAIR	ROOTS
431638	431637	1+04	RIGHT	REINSTATE	
431638	431637	1+07	LEFT	REINSTATE	
431638	431637	1+47	RIGHT	REINSTATE	
431638	431637	1+57	LEFT	REPAIR	ROOTS
431638	431637	1+60	RIGHT	REINSTATE	
431638	431637	1+94	RIGHT	REPAIR	ROOTS
431638	431637	2+10	LEFT	REINSTATE	
431638	431637	2+37	RIGHT	REPAIR	ROOTS

SEWER FLOWS		
	PDWF	PWWF
UP MH	DO MH	Q (gpm)
431638	431637	20.4
		117.1



#### NOTES

- (E) MH 431642 IS EXPERIENCING SEVERE ROOT INTRUSION SURROUNDING THE INFLOW PIPE PENETRATION. CONTRACTOR SHALL REMOVE ALL (E) ROOTS AND DEBRIS FROM MH, GROUT AROUND INFLOW AND OUTFLOW PIPES AND REHABILITATE MH PER SPECIFICATION SECTION 09900.
- MODIFICATIONS TO THE EXISTING PIPE OUTSIDE THE MANHOLE IS NOT REQUIRED ON MONTE CRESTA DR.



NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
4			
5			
6			
7			
8			



BELMONT, CALIFORNIA

**Schaaf & Wheeler**  
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DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
BARCLAY WAY & MONTE CRESTA DR

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

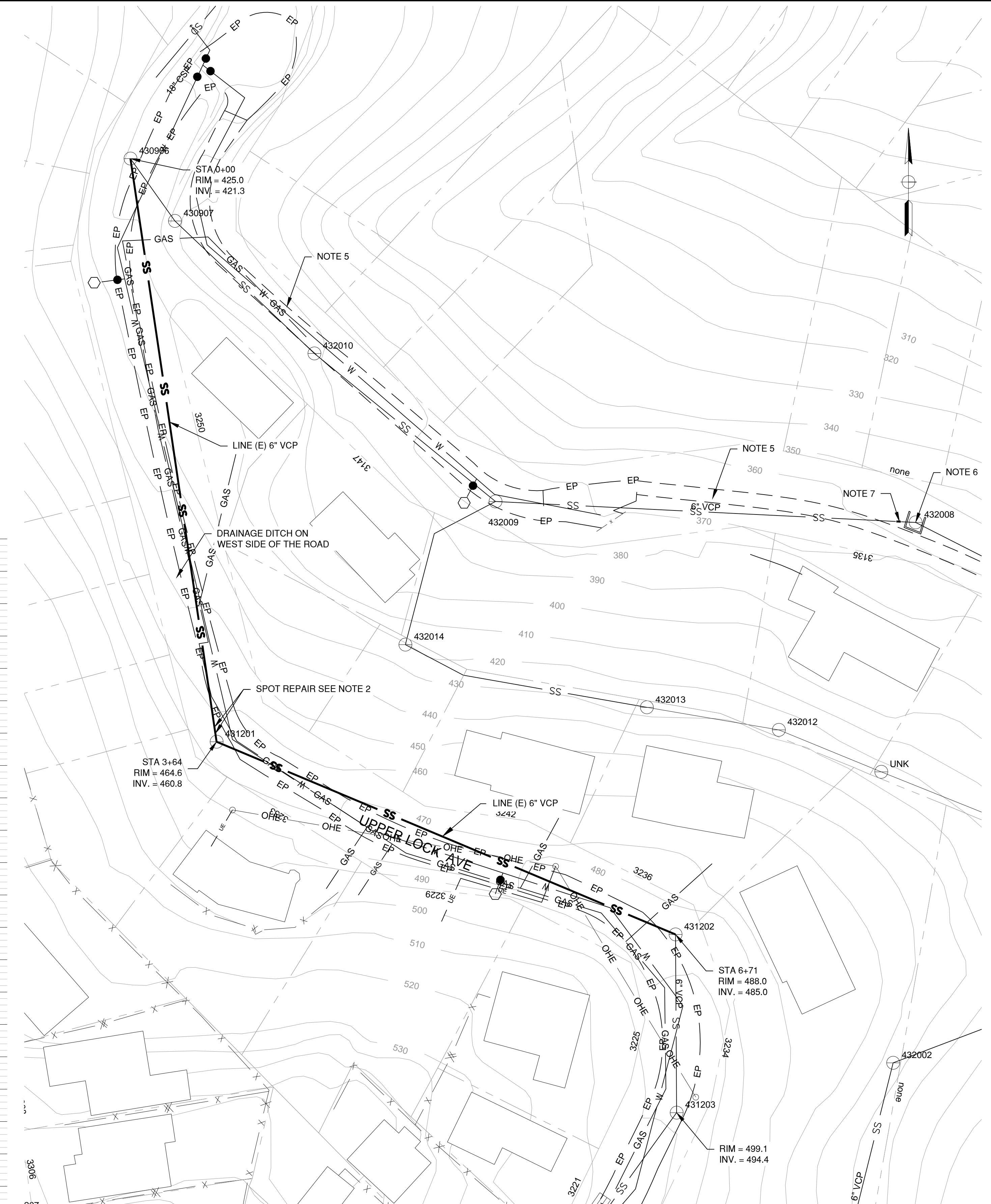
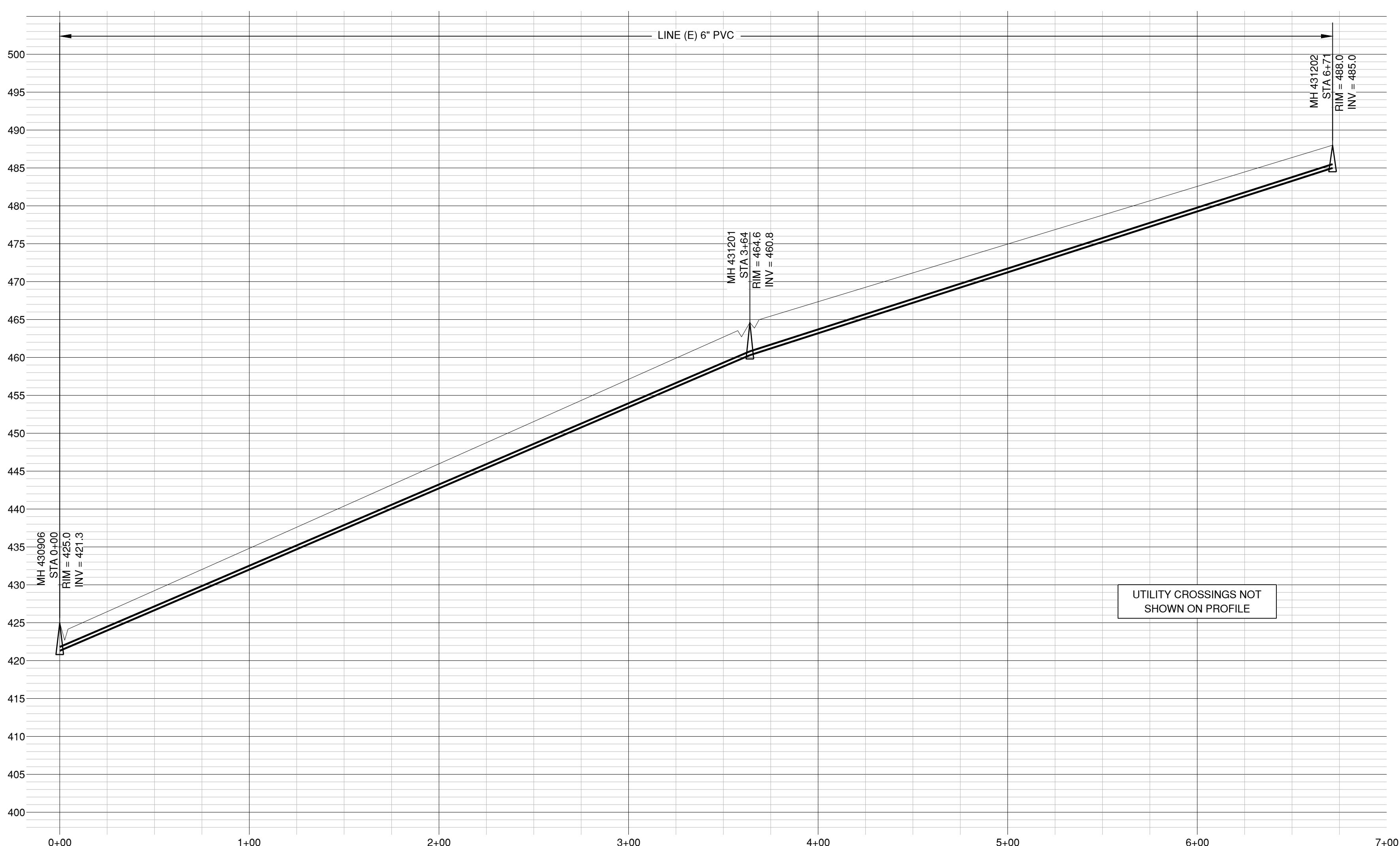
**SHEET**  
**4**  
OF  
**19**

## NOTES

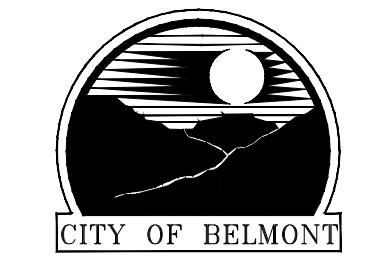
- STREET WIDTH NARROWS TO ONE LANE & HAS DENSE VEGETATION/LOW HANGING TREE BRANCHES.
- REPAIR MEDIUM JOINT OFFSET AT STA 3+55± AND 3+58± PER DETAIL 8 ON SHEET 18.
- CONTRACTOR SHALL PROVIDE NOTICE TO LOCAL RESIDENTS OF ANY POTENTIAL ROADWAY DELAYS. UNDER NO CIRCUMSTANCE SHALL CONTRACTOR DELAY LOCAL TRAFFIC BY MORE THAN 10 MINUTES.
- PRIOR TO LINING EXISTING PIPE CONTRACTOR SHALL FIELD VERIFY THAT ALL LATERALS SHOWN TO BE ABANDONED ARE INACTIVE.
- 8.5 FT +/- WIDE GRAVEL ROAD.
- MH 432008 IS LOCATED ON A SLOPE PROTECTED BY A SAND BAG RETAINING WALL. DISTANCE FROM ROAD GRADE TO MH RIM = 50±'. DISTANCE FROM MH RIM TO INVERT = 71±'.
- REPAIR JOINT OFFSET 10 FT± UPSTREAM FROM MH 432008 PER DETAIL 8 ON SHEET 18.

SEWER FLOWS			
UP MH	DO MH	PDWF	PWWF
431202	431201	9.1	52.6

LATERAL LOCATIONS					
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL	NOTES
431201	430906	0+39	RIGHT	ABANDON	
431201	430906	0+60	RIGHT	ABANDON	ROOTS
431201	430906	0+95	RIGHT	ABANDON	ROOTS
431201	430906	1+42	RIGHT	ABANDON	ROOTS
431201	430906	1+97	RIGHT	ABANDON	ROOTS
431201	430906	2+47	RIGHT	ABANDON	
431201	430906	2+98	RIGHT	ABANDON	
431201	430906	3+49	RIGHT	ABANDON	
431202	431201	3+84	RIGHT	REINSTATE	
431202	431201	4+20	RIGHT	REINSTATE	
431202	431201	4+67	RIGHT	REINSTATE	
431202	431201	5+00	RIGHT	REINSTATE	
431202	431201	5+25	RIGHT	ABANDON	CAPPED
431202	431201	5+29	RIGHT	REINSTATE	
431202	431201	5+84	RIGHT	REINSTATE	



NO	REVISIONS	DATE	APPR
▲	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
▲	WATER SEPARATION	7/15/15	BLS
▲			
▲			
▲			
▲			
▲			
▲			



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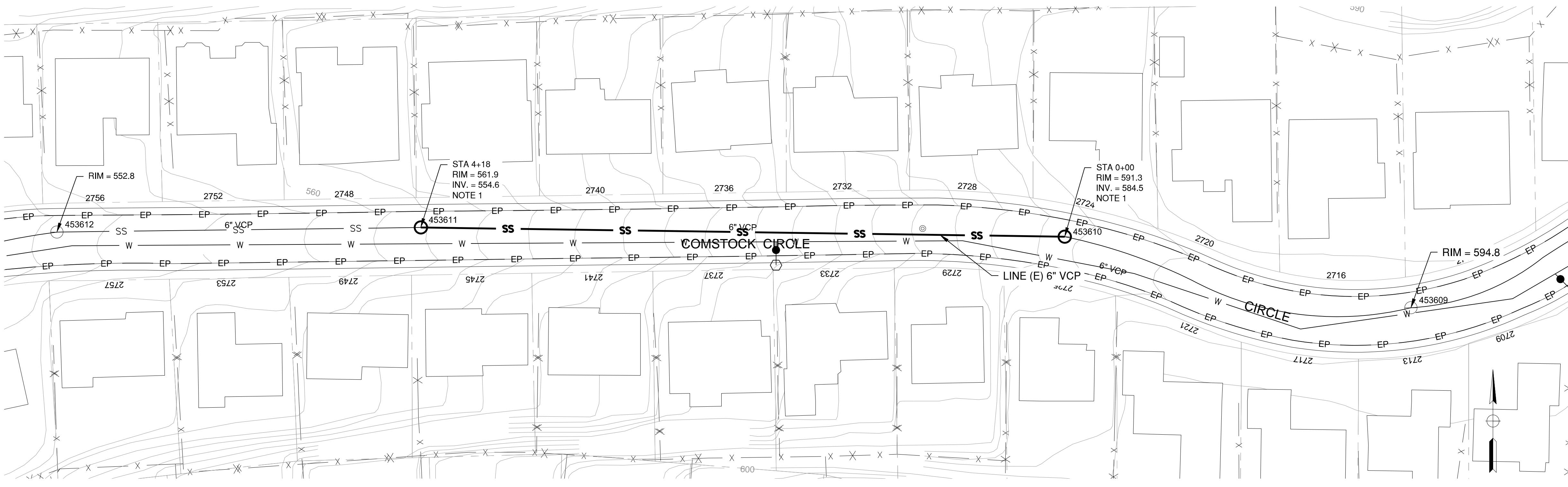


6/02/15

DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
UPPER LOCK AVE

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

**SHEET**  
**5**  
OF  
**19**

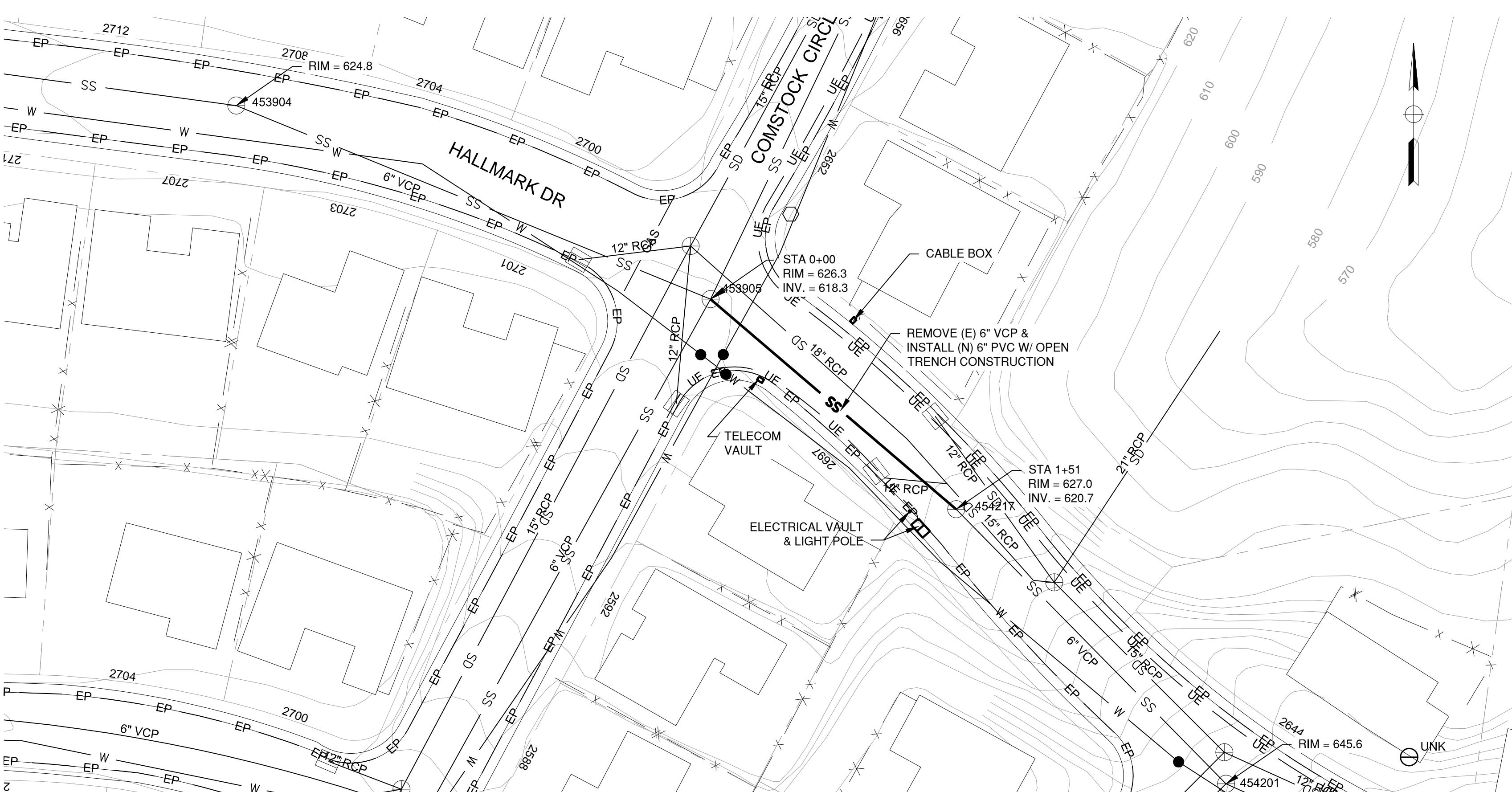


SEWER FLOWS		
UP MH	DO MH	PDWF PWWF
454217	453905	Q (gpm) Q (gpm)
		11.3 54.3

LATERAL LOCATIONS					
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL	NOTES
453610	453611	0+77	RIGHT	REINSTATE	
453610	453611	0+83	LEFT	REINSTATE	
453610	453611	1+55	RIGHT	REINSTATE	
453610	453611	1+61	LEFT	REINSTATE	
453610	453611	2+37	RIGHT	REINSTATE	
453610	453611	2+43	LEFT	REINSTATE	
453610	453611	3+18	RIGHT	REINSTATE	
453610	453611	3+24	LEFT	REINSTATE	
453610	453611	3+46	RIGHT	REINSTATE	
453610	453611	3+88	RIGHT	REINSTATE	
453610	453611	4+02	LEFT	REINSTATE	

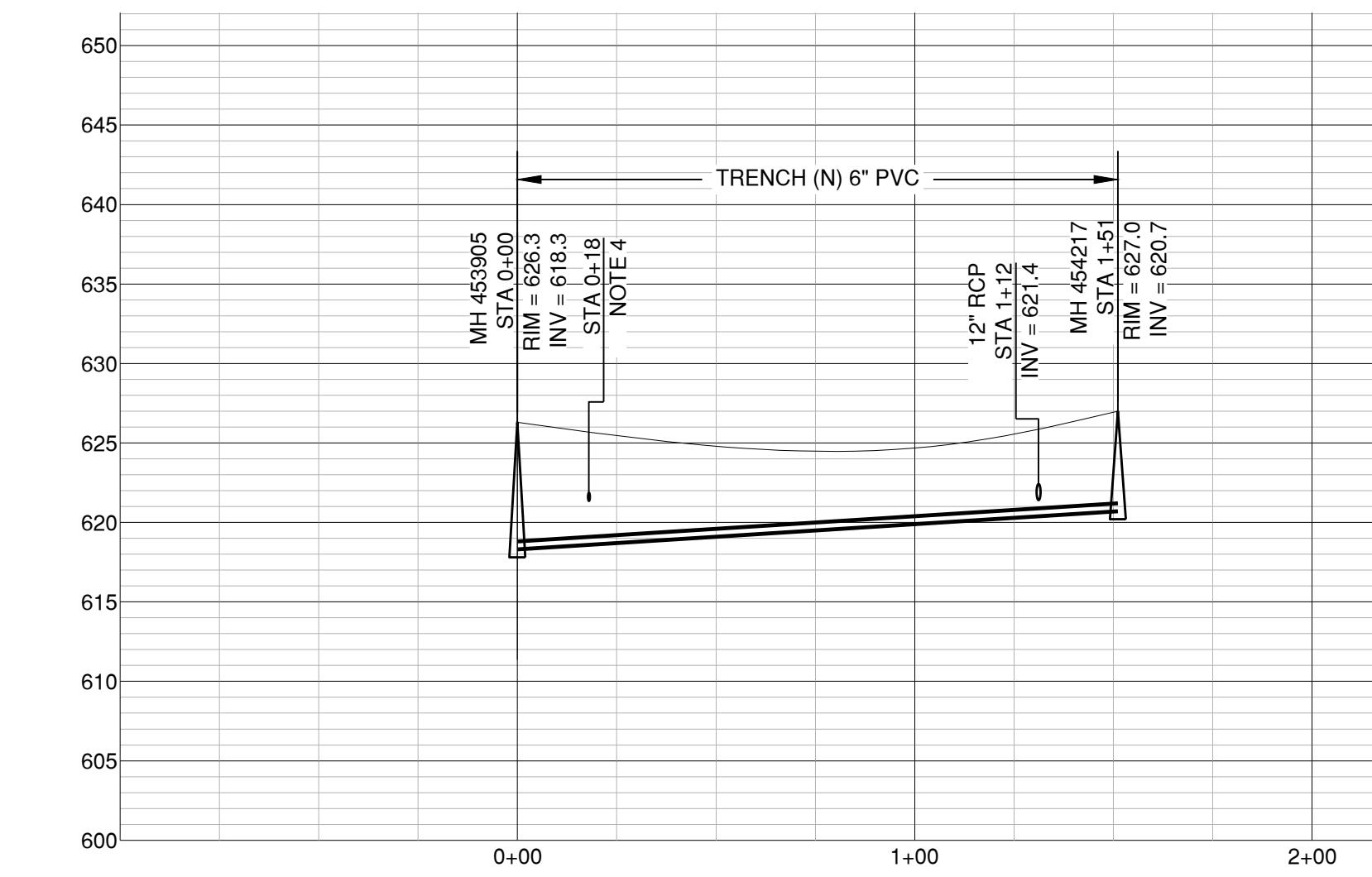
### COMSTOCK CIRCLE

SCALE: 1" = 40'



### HALLMARK DR

SCALE: 1" = 40'



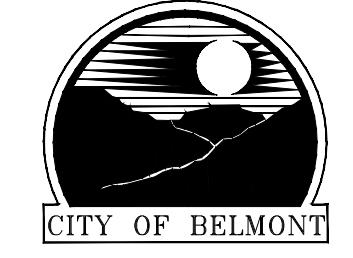
### HALLMARK DR PROFILE

HOR. SCALE: 1" = 40'  
VER. SCALE: 1" = 10'

REVISION OF WATER MAIN SEPARATION REQUIREMENTS / INFORMATION

REVISION OF UNDERGROUND UTILITY LOCATION

NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
4			
5			
6			
7			
8			



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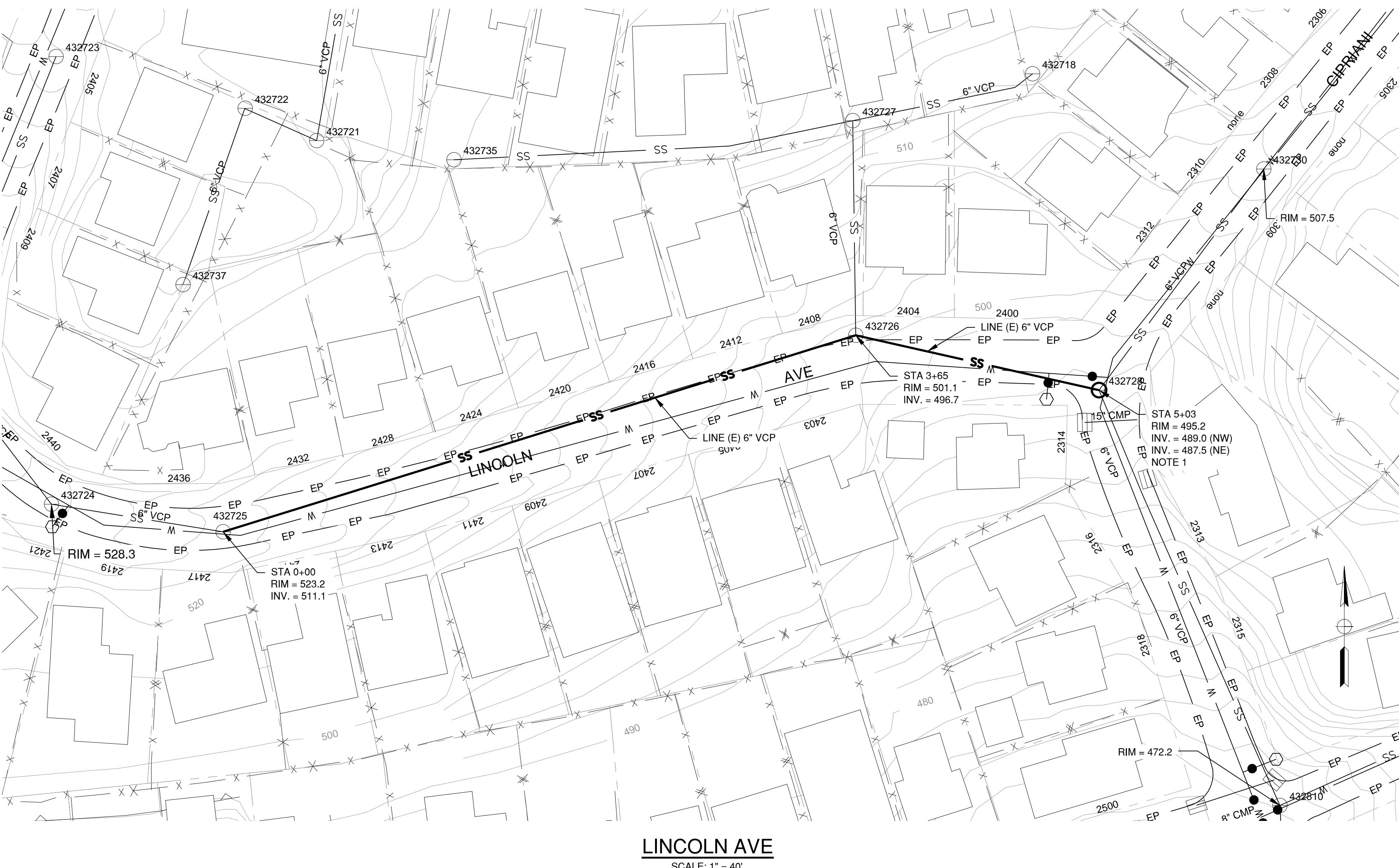
DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
HALLMARK DR & COMSTOCK CIRCLE

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

**SHEET**  
**6**  
OF  
**19**

## NOTES

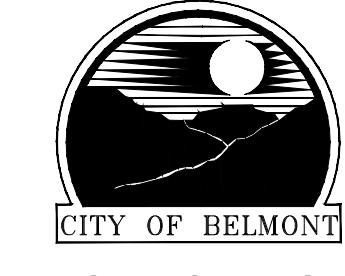
- REHABILITATE EXISTING MANHOLE PER TECHNICAL SPECIFICATIONS SECTION 09900.



LATERAL LOCATIONS					
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL	NOTES
432725	432726	0+23	LEFT	REPAIR	POOR CONNECTION
432725	432726	0+46	X	REINSTATE	
432725	432726	0+49	RIGHT	ABANDON	CAPPED
432725	432726	0+76	LEFT	REINSTATE	
432725	432726	0+89	RIGHT	REINSTATE	
432725	432726	0+97	RIGHT	ABANDON	CAPPED
432725	432726	1+24	LEFT	REPAIR	ROOTS
432725	432726	1+52	RIGHT	REINSTATE	
432725	432726	1+72	LEFT	REINSTATE	
432725	432726	2+03	RIGHT	REPAIR	ROOTS
432725	432726	2+23	RIGHT	REPAIR	ROOTS
432725	432726	2+27	LEFT	ABANDON	CAPPED
432725	432726	2+55	RIGHT	REPAIR	ROOTS
432725	432726	2+75	LEFT	REPAIR	ROOTS
432725	432726	3+13	RIGHT	REPAIR	ROOTS
432725	432726	3+25	LEFT	REPAIR	ROOTS
432725	432726	3+53	RIGHT	REINSTATE	
432726	432728	3+93	LEFT	REPAIR	PROTRUDES
432726	432728	4+63	X	REPAIR	PROTRUDES

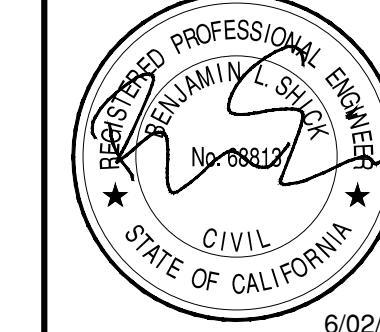
SEWER FLOWS			
UP MH	DO MH	PDWF Q (gpm)	PWWF Q (gpm)
432725	432726	24.4	93.0
432726	432728	27.3	104.1

NO	REVISIONS	DATE	APPR
△	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
△	WATER SEPARATION	7/15/15	BLS
△			
△			
△			
△			
△			
△			



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DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
LINCOLN AVE

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

**SHEET**  
**7**  
OF  
**19**

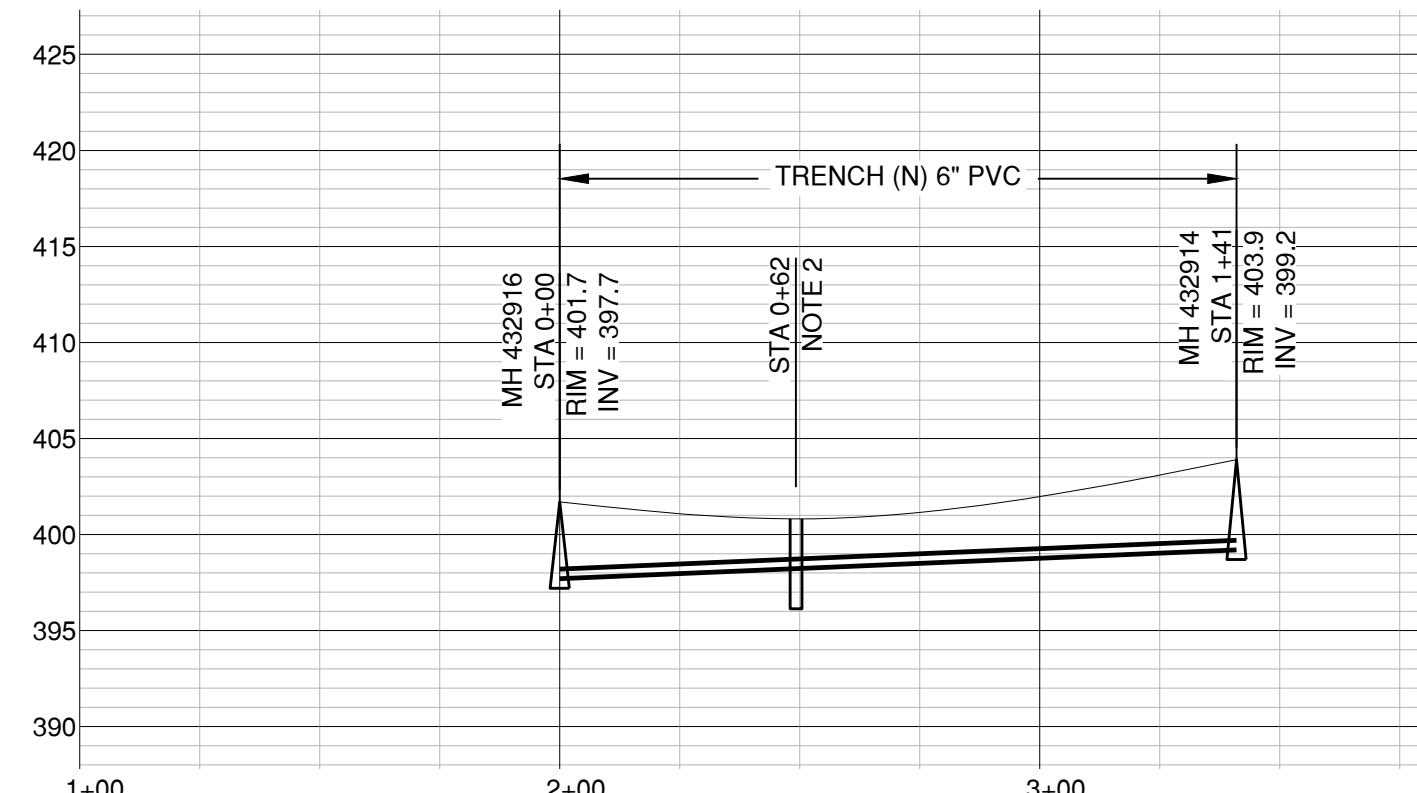
**NOTES**

- REHABILITATE EXISTING MANHOLE PER TECHNICAL SPECIFICATIONS SECTION 09900.
- 3 FT ± WIDE TRENCH DRAIN 56"± DEEP. SS INV. CROSSES SD AT A DEPTH OF 32"±. INSTALL (N) CASING ACROSS TRENCH DRAIN PER DETAIL 9 ON SHEET 18.
- LINE (E) SEWER TO MH 432910. REINSTATE DROPPED INVERT OPENING. DO NOT LINE (E) DROPPED INVERT.
- (E) ABANDONED 4" CAST IRON PIPE WATER LINE.

SEWER FLOWS		
UP MH	DO MH	PDWF PWWF
432911	432916	Q (gpm) Q (gpm)
55.1	210.4	

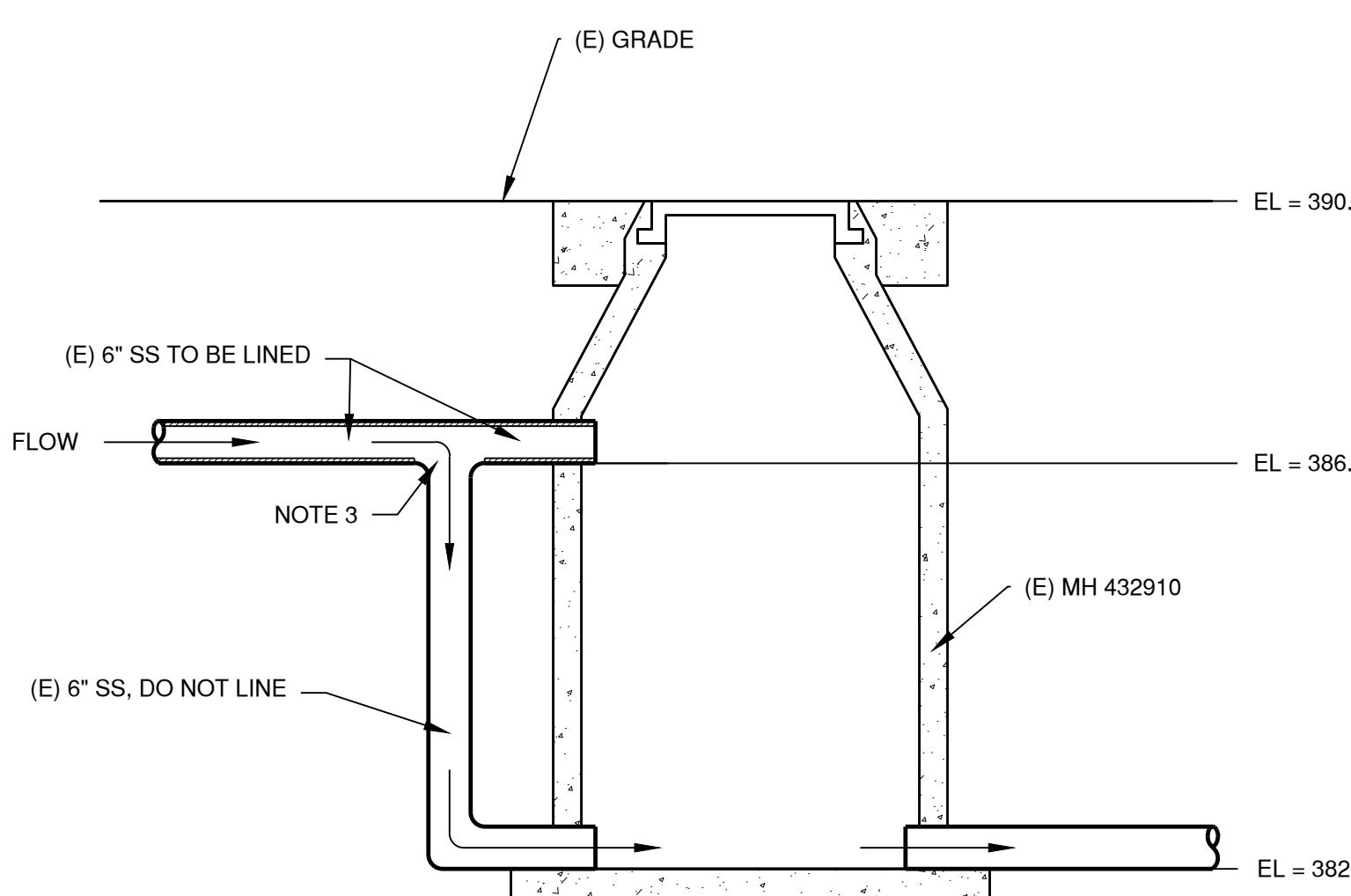
LATERAL LOCATIONS				
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL
432914	432916	0+44	LEFT	CRACKS
432914	432916	0+68	LEFT	
432911	432910	10+59	LEFT	REPAIR ROOTS
432911	432910	11+27	LEFT	REINSTATE
432911	432910	11+30	X	REINSTATE DROPPED INVERT

NOTE 3



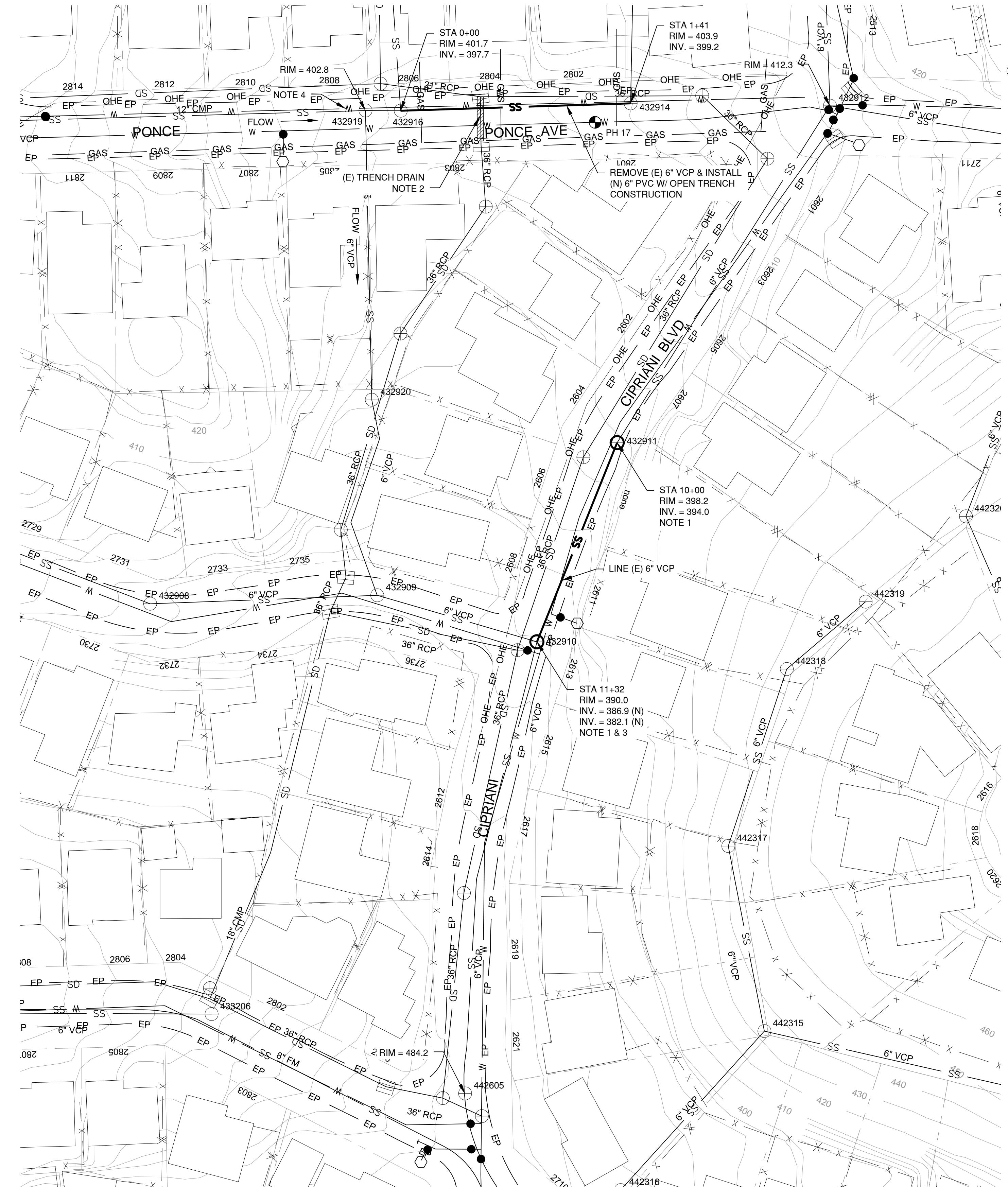
**PONCE AVE PROFILE**

HOR. SCALE: 1" = 40'  
VER. SCALE: 1" = 10'



**MH 432910**

SCALE: 1" = 2'

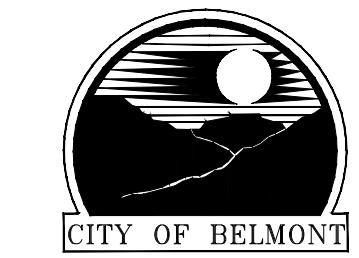


**CIPRIANI BLVD & PONCE AVE**

SCALE: 1" = 40'

REVISION OF UNDERGROUND UTILITY LOCATION & POTHOLE INFORMATION

NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
4			
5			
6			
7			



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DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
CIPRIANI BLVD & PONCE AVE

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

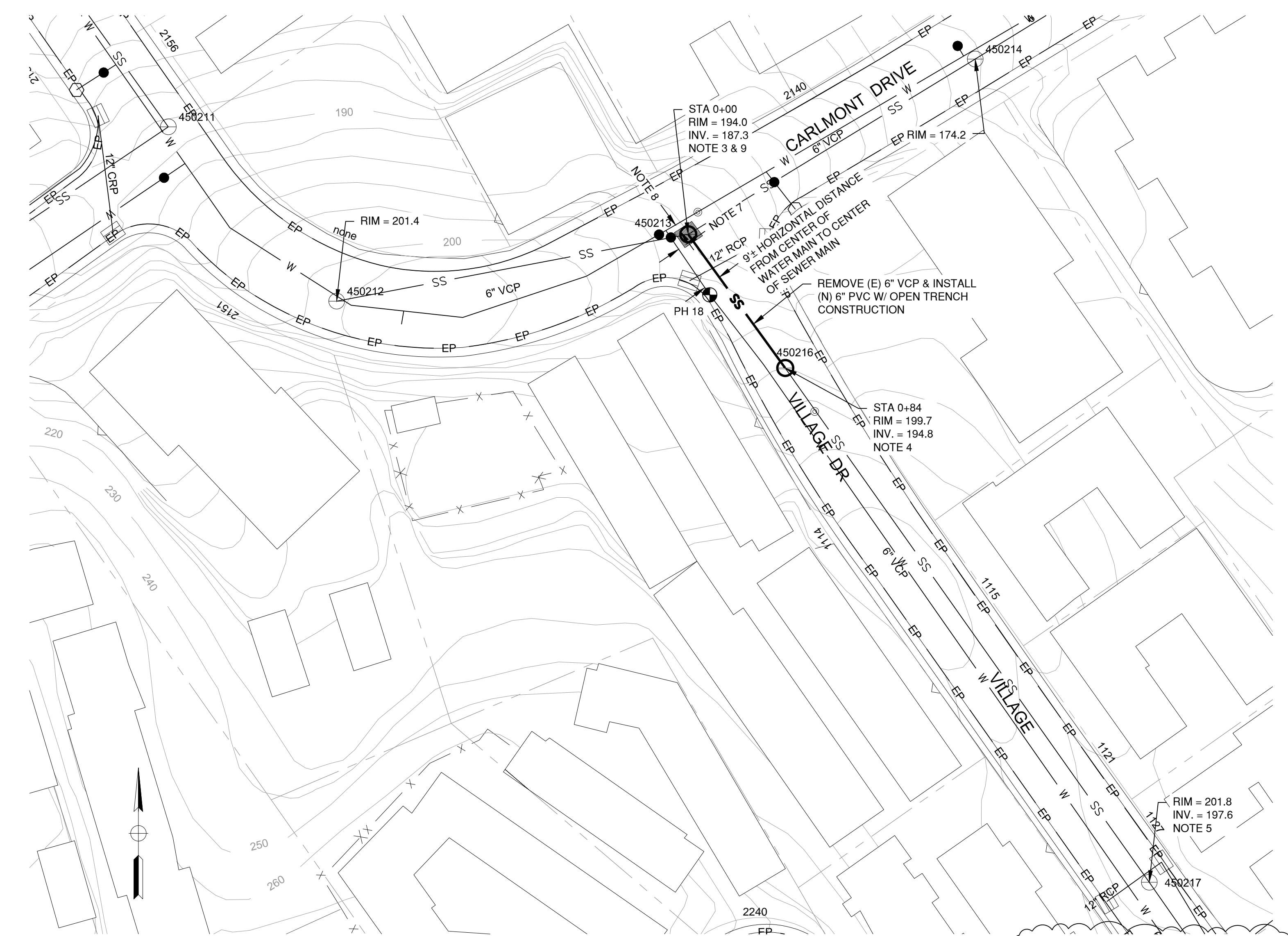
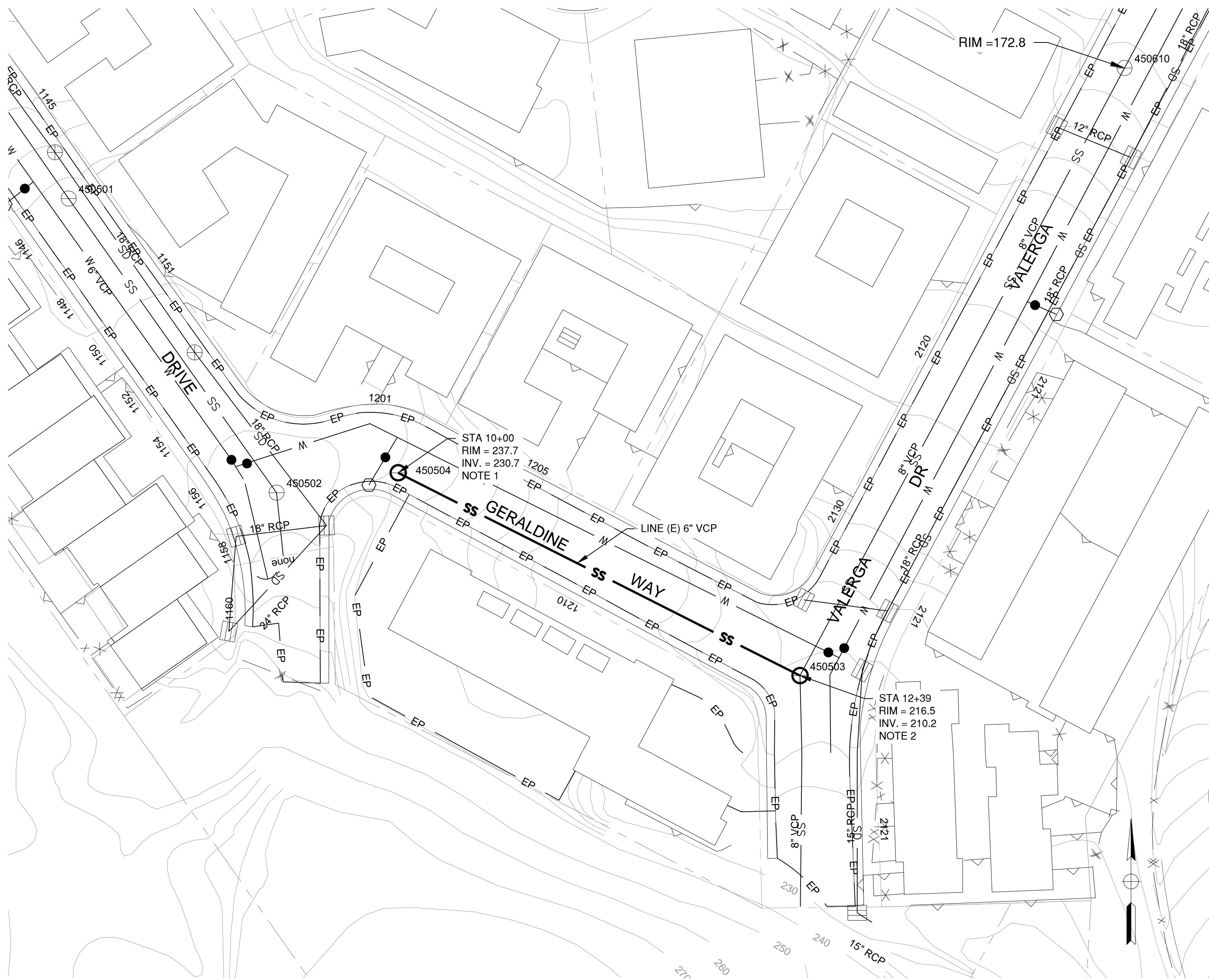
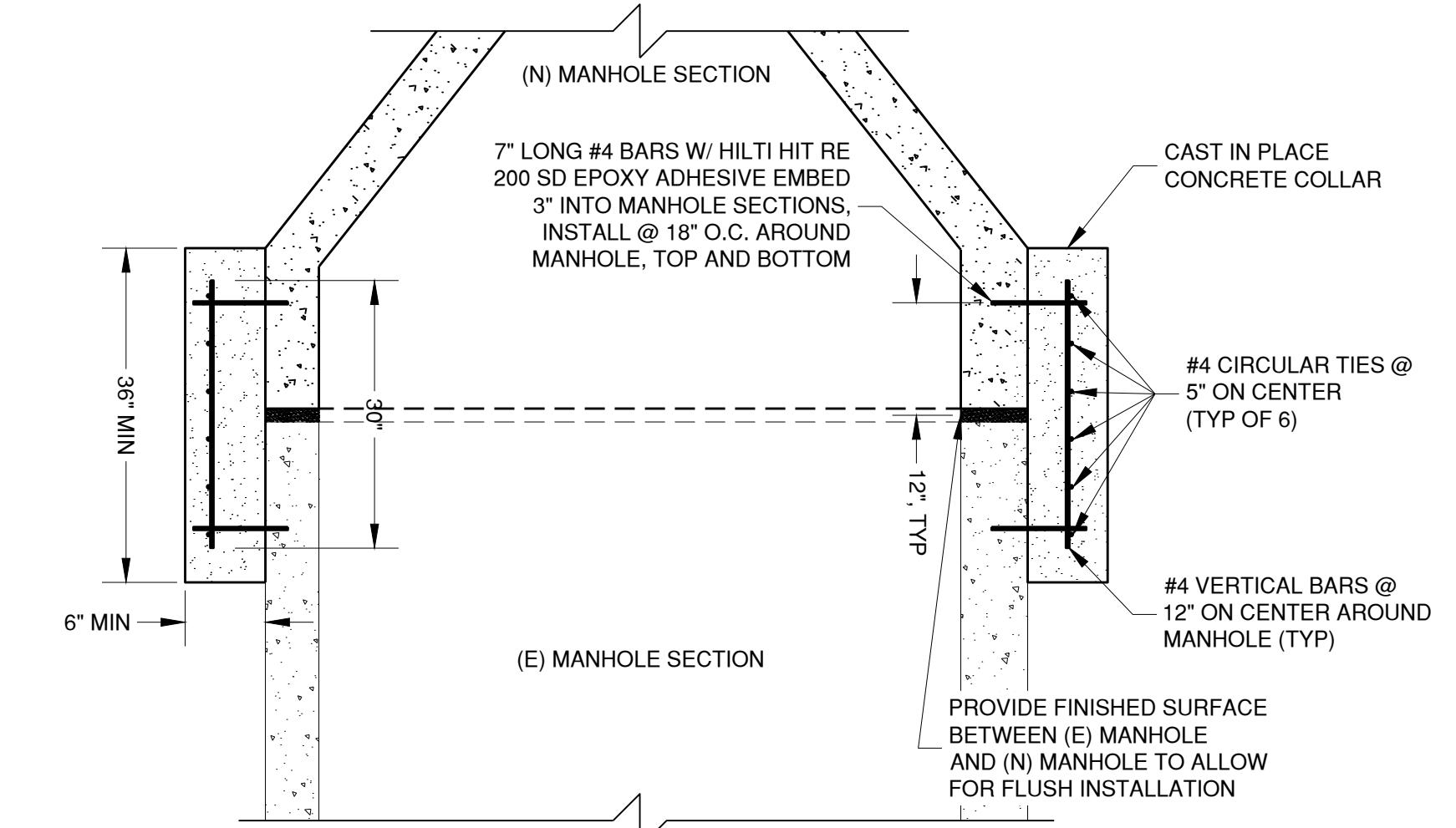
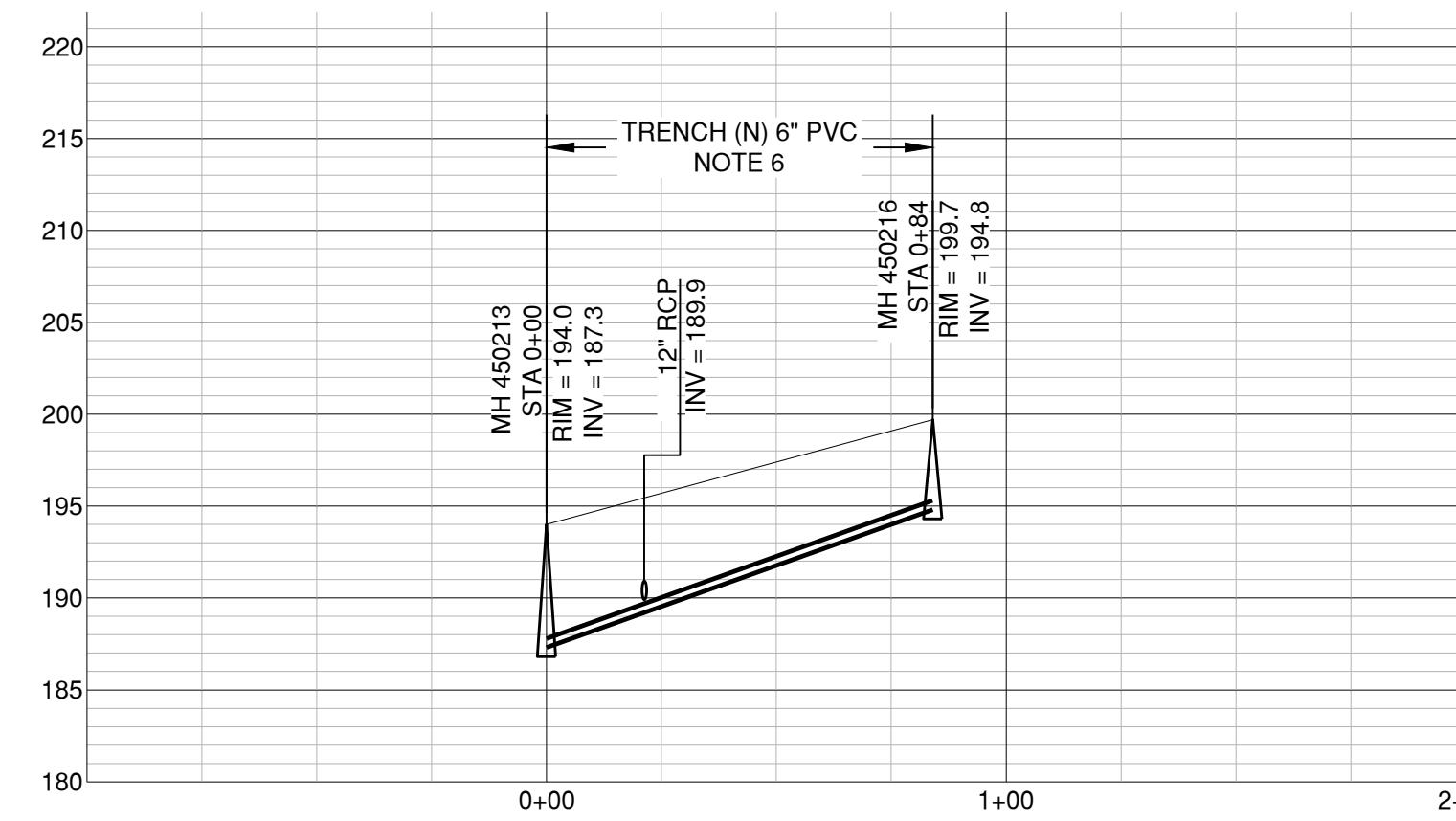
**SHEET**  
**8**  
OF  
**19**

LATERAL LOCATIONS					
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL	NOTES
450504	450503	10+33	LEFT	REINSTATE	
450504	450503	10+58	LEFT	REINSTATE	
450504	450503	11+31	RIGHT	REINSTATE	
450504	450503	11+62	LEFT	REPAIR	ROOTS
450504	450503	12+33	RIGHT	REPAIR	ROOTS

SEWER FLOWS		
	PDWF	PWWF
UP MH	DO MH	Q (gpm)
450504	450503	2.3
450216	450213	9.7
		24.5

### NOTES

1. REPLACE (E) CLEANOUT WITH (N) MH, PER DETAIL 1 ON SHEET 18 PRIOR TO LINING (E) PIPE.
2. REHABILITATE EXISTING MANHOLE PER TECHNICAL SPECIFICATIONS SECTION 09900.
3. REPLACE (E) MH CONE SECTION, RIM, AND COVER PER DETAIL 1 & 2 ON SHEET 18. POUR CONCRETE COLLAR BETWEEN (N) CONE AND (E) MH PER DETAIL 1 ON SHEET 9. CONTRACTOR SHALL FIELD VERIFY SIZE AND DIMENSIONS PRIOR TO ORDERING MATERIALS. CONTRACTOR'S OPTION TO REPLACE ENTIRE MH.
4. REPLACE MH FRAME AND COVER, PER DETAIL 1 & 3 ON SHEET 18.
5. REFORM MH INVERT W/ NON-SHRINK GROUT PER DETAIL 1 ON SHEET 18.
6. INSTALL SEWER PIPE WITH RUBBER RING JOINTS PER WATER SEPARATION NOTES ON SHEET 2.
7. 5.5± CLEARANCE BETWEEN MANHOLE AND WATER MAIN.
8. 4.5± CLEARANCE BETWEEN MANHOLE AND WATER MAIN.
9. WATER MAIN SHALL BE SHUTDOWN BY MID PENINSULA WATER DISTRICT PRIOR TO EXCAVATING IN ACCORDANCE WITH SPECIFICATION SECTION 01120-1.10.



NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
4			
5			
6			
7			
8			



BELMONT, CALIFORNIA

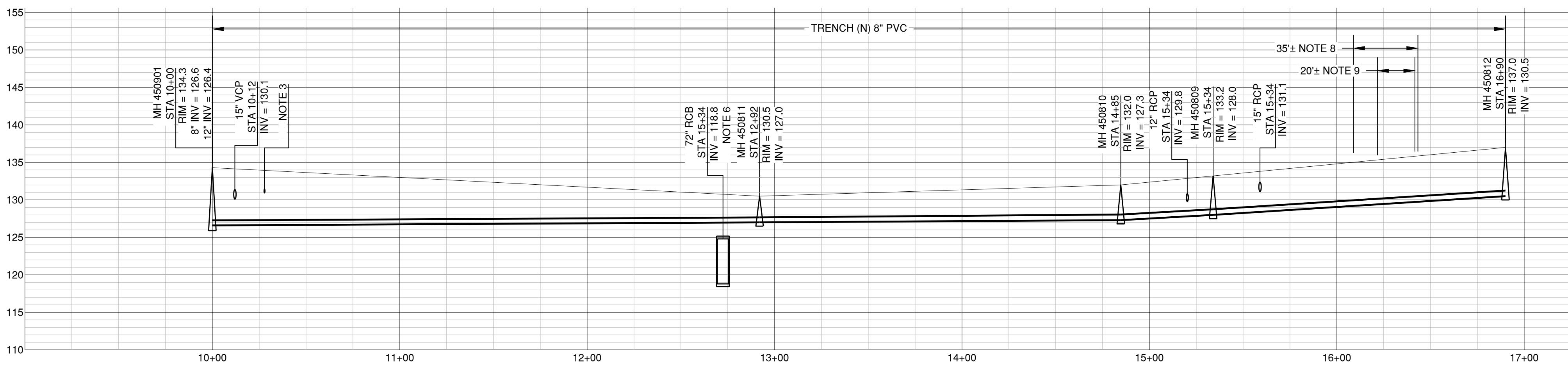
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DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
GERALDINE WAY & VILLAGE DR

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

**SHEET**  
**9**  
OF  
**19**

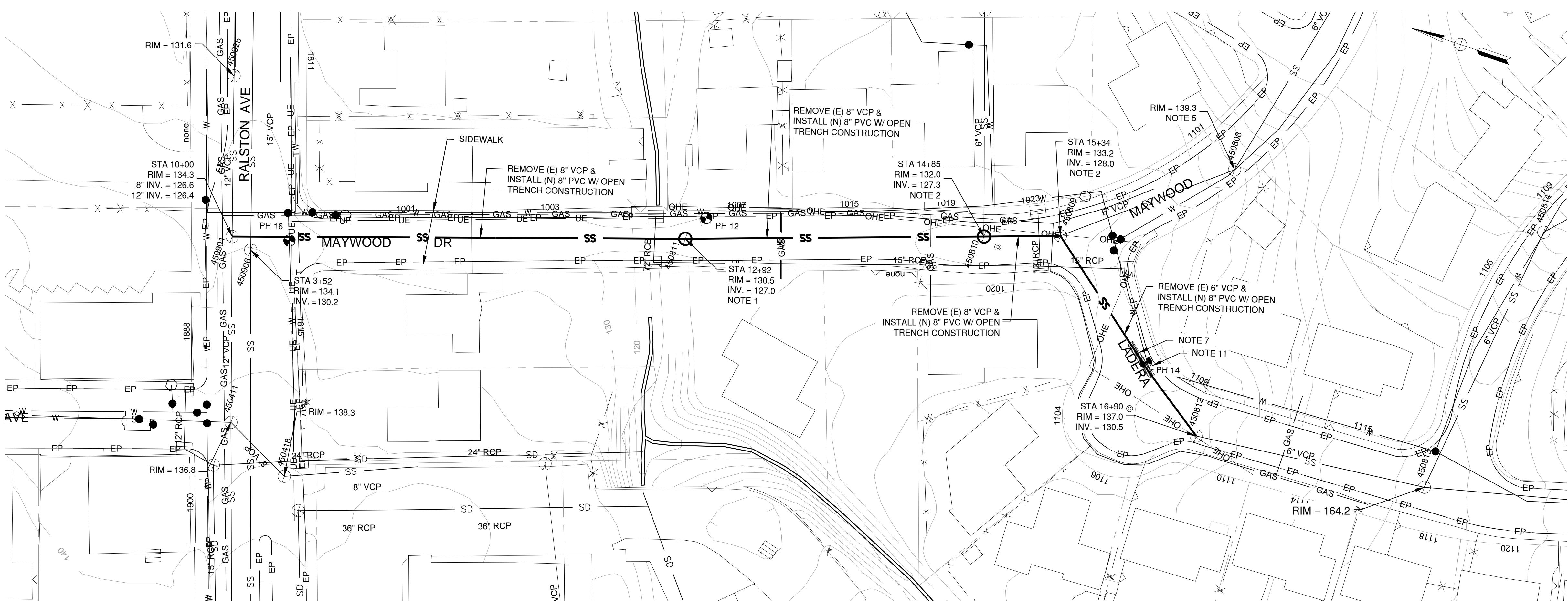


#### NOTES

- SPOT REPAIR 4"± DIAMETER VOID INSIDE MH W/ NON-SHRINK GROUT.
- REHABILITATE EXISTING MANHOLE PER TECHNICAL SPECIFICATIONS SECTION 09900.
- 3.5"± VERTICAL CLEARANCE BETWEEN SEWER AND WATER MAIN.
- REFER TO SHEET 2 FOR RALSTON LANE CLOSURE REQUIREMENTS.
- SPOT REPAIR VOID IN TROUGH W/ NON-SHRINK GROUT AND REHABILITATE EXISTING MANHOLE PER TECHNICAL SPECIFICATIONS SECTION 09900.
- TOP OF CULVERT IS 5'-7"± BELOW TOP OF PAVEMENT.
- WATER MAIN SHALL BE SHUTDOWN BY MID PENINSULA WATER DISTRICT PRIOR TO EXCAVATING IN ACCORDANCE WITH SPECIFICATION SECTION 01120-1.10.
- INSTALL SEWER PIPE WITH RUBBER RING JOINTS PER WATER SEPARATION NOTES ON SHEET 2.
- BACKFILL WITH CDF PER WATER SEPARATION NOTES ON SHEET 2.
- WATER MAIN STATIC PRESSURES RANGE FROM 110 TO 120 PSI.
- POTENTIAL WATER MAIN THRUST BLOCK, DO NOT DISTURB.

SEWER FLOWS		
	PDWF	PWWF
UP MH	DO MH	Q (gpm)
450809	450810	24.9 151.7
450810	450811	30.0 182.8
450811	450901	30.0 182.8

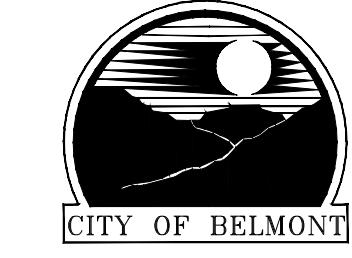
LATERAL LOCATIONS					
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL	NOTES
450811	450901	10+62	LEFT		
450811	450901	11+18	LEFT		
450811	450901	11+71	LEFT		
450811	450901	12+50 TO 12+82		CAMERA UNDERWATER	
450810	450811	13+12	RIGHT		
450810	450811	13+14	LEFT	ROOTS	
450810	450811	13+99	LEFT		
450810	450811	14+60	LEFT		
450812	450809	16+03	LEFT		
450812	450809	16+07	RIGHT		
450812	450809	16+28	RIGHT		
450812	450809	16+51	LEFT	ROOTS	
450812	450809	16+61	RIGHT		



MAYWOOD DR & LADERA WAY

SCALE: 1" = 40'

NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
4			
5			
6			
7			



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6/02/15

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2015 SEWER  
REHABILITATION PROJECT  
MAYWOOD DR & LADERA WAY

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
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CHECKED: BLS

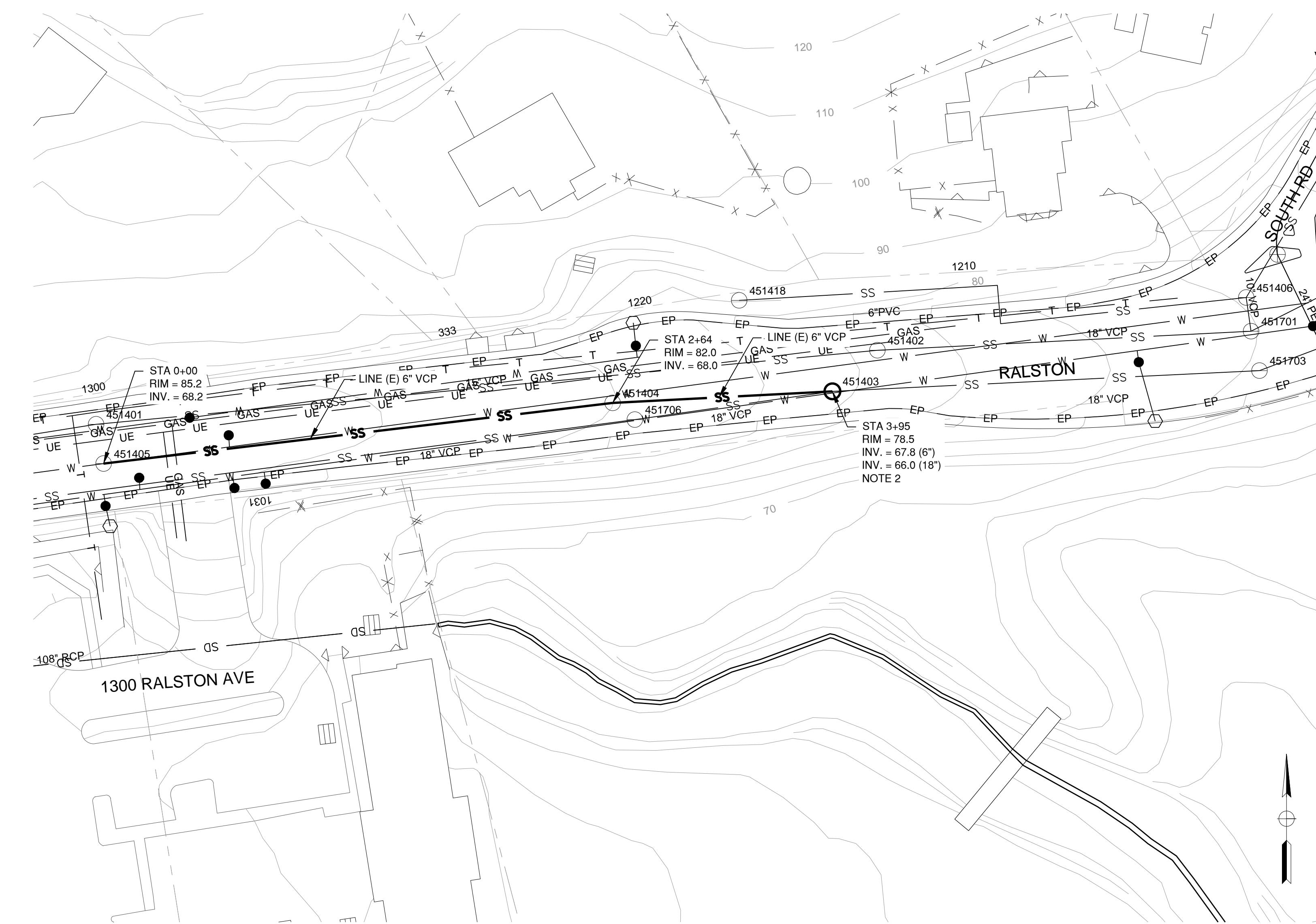
SHEET  
10  
OF  
19

LATERAL LOCATIONS					
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL	NOTES
451405	451404	1+43	X	REINSTATE	
451405	451404	1+48	RIGHT	REINSTATE	VOID NEAR LATERAL

SEWER FLOWS		
UP MH	DO MH	PDWF Q (gpm) PWPF Q (gpm)
451404	451403	0.3 1.2

### NOTES

- SEE NOTES ON SHEET 2 FOR RALSTON AVE LANE CLOSURE REQUIREMENTS.
- REHABILITATE EXISTING MANHOLE PER TECHNICAL SPECIFICATIONS SECTION 09900.



1300 RALSTON AVE  
SCALE: 1" = 40'

NO	REVISIONS	DATE	APPR
▲	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
▲	WATER SEPARATION	7/15/15	BLS
▲			
▲			
▲			
▲			
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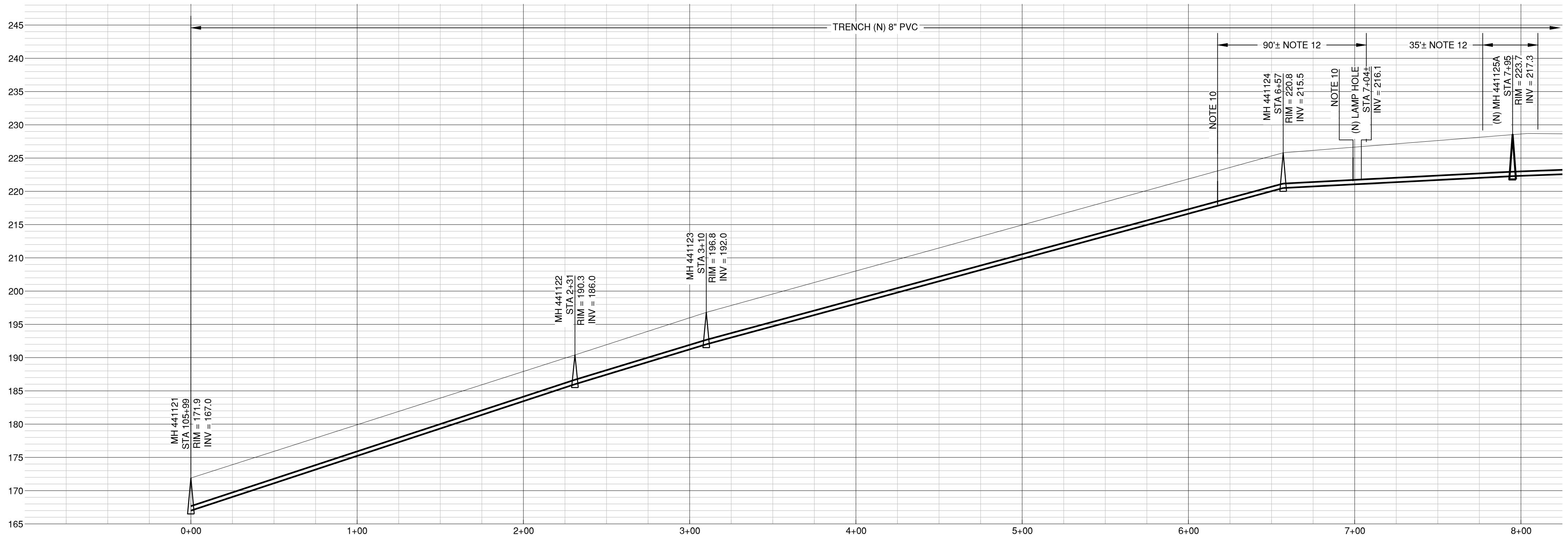
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DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
RALSTON AVE

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

**SHEET**  
**11**  
OF  
**19**



SEWER FLOWS		
	PDWF	PWWF
UP MH	DO MH	Q (gpm)
441122	441121	31.2
441123	441122	27.3
441124	441123	27.3
		81.6

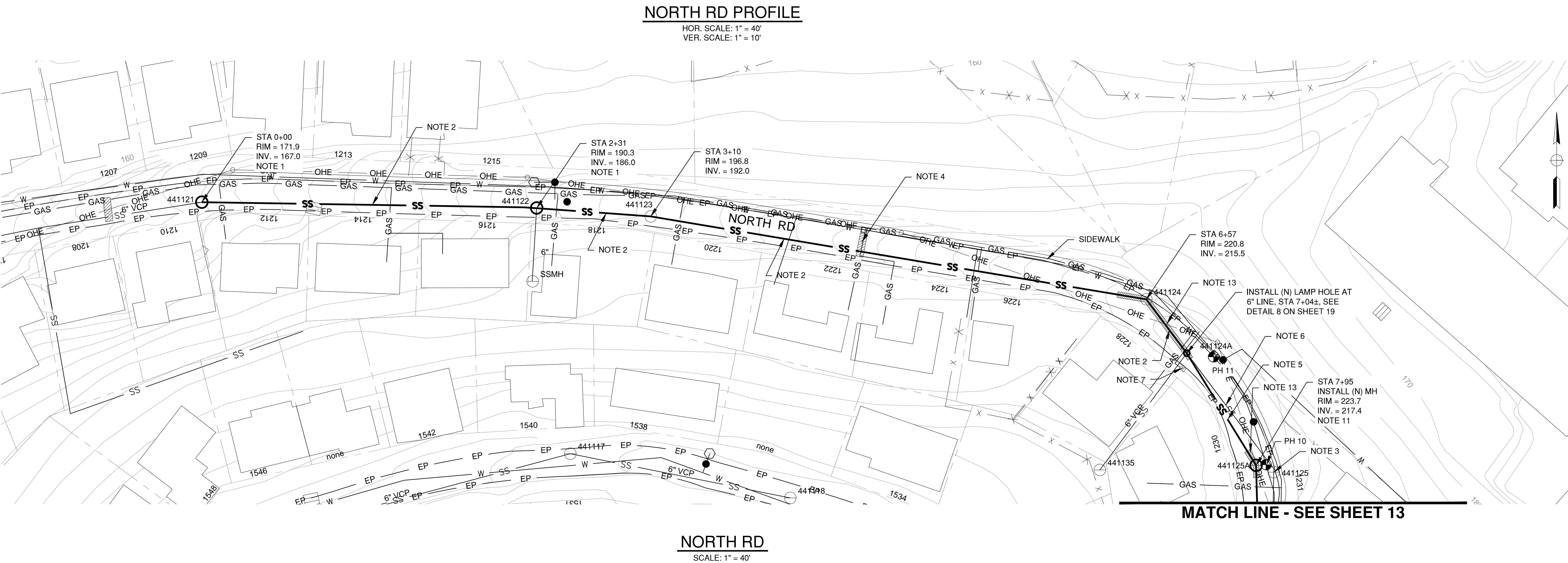
LATERAL LOCATIONS					
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL	NOTES
441122	441121	0+44	RIGHT		
441122	441121	0+76	RIGHT		CAPPED
441122	441121	1+13	RIGHT		
441122	441121	1+51	RIGHT		
441124	441123	3+22	RIGHT		
441124	441123	3+88	RIGHT		
441124	441123	4+67	RIGHT		ROOTS
441124	441123	5+38	RIGHT		ROOTS
441124	441123	5+48	RIGHT		ROOTS
441124	441123	5+48	RIGHT		ROOTS
441125	441124	7+04	RIGHT		

#### NOTES

- REHABILITATE EXISTING MANHOLE PER TECHNICAL SPECIFICATIONS SECTION 09900.
- REMOVE (E) VCP & INSTALL (N) 8" PVC W/ OPEN TRENCH CONSTRUCTION.
- ABANDON (E) MH, SEE DETAIL 7 ON SHEET 19. MH FRAME IS OFFSET FROM SS MAIN.
- (E) REMOVABLE SPEED BUMP. REMOVE AND REPLACE AS NECESSARY FOR CONSTRUCTION OF THE NEW SEWER.
- RE-ALIGN SEWER MAIN TO AVOID UTILITY CONFLICTS. CONTRACTOR SHALL POTHOLE UTILITY LOCATIONS AND HAVE THE CITY VERIFY NEW ALIGNMENT PRIOR TO CONSTRUCTION.
- ABANDON (E) VCP PER SPECIFICATION SECTION 02532.
- (E) WATER METERS.
- CHIP & REFORM MH INVERTS PER DETAIL 1 ON SHEET 18 AT ALL MH W/ UPSIZED SS PIPE, GROUT AROUND (N) PIPE MH CONNECTION.
- IN ACCORDANCE W/ THE SPECIFICATIONS & AN APPROVED TRAFFIC CONTROL PLAN, CONTRACTOR CAN TEMPORARILY CLOSE PORTIONS OF THE STREET DURING WORKING HOURS.
- APPROXIMATE LOCATION OF WATER MAIN, DEPTH UNKNOWN. CONTRACTOR SHALL POTHOLE LOCATION OF UTILITY CROSSINGS PRIOR TO CONSTRUCTION.
- INSTALL (N) MH OFFSET APPROXIMATELY 13 FT FROM CENTER OF (E) MH COVER.
- INSTALL SEWER PIPE WITH RUBBER RING JOINTS PER WATER SEPARATION NOTES ON SHEET 2.
- WATER MAIN SHALL BE SHUTDOWN BY MID PENINSULA WATER DISTRICT PRIOR TO EXCAVATING IN ACCORDANCE WITH SPECIFICATION SECTION 01120-1.10.
- WATER MAIN STATIC PRESSURES RANGE FROM 75 TO 85 PSI.

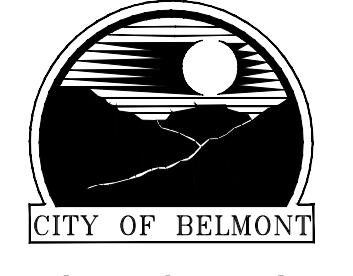
REVISION OF WATER MAIN SEPARATION REQUIREMENTS / INFORMATION

REVISION OF UNDERGROUND UTILITY LOCATION & POTHOLE INFORMATION



NORTH RD  
SCALE: 1" = 40'

NO	REVISIONS	DATE	APPR
▲	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
▲	WATER SEPARATION	7/15/15	BLS
▲			
▲			
▲			
▲			
▲			
▲			



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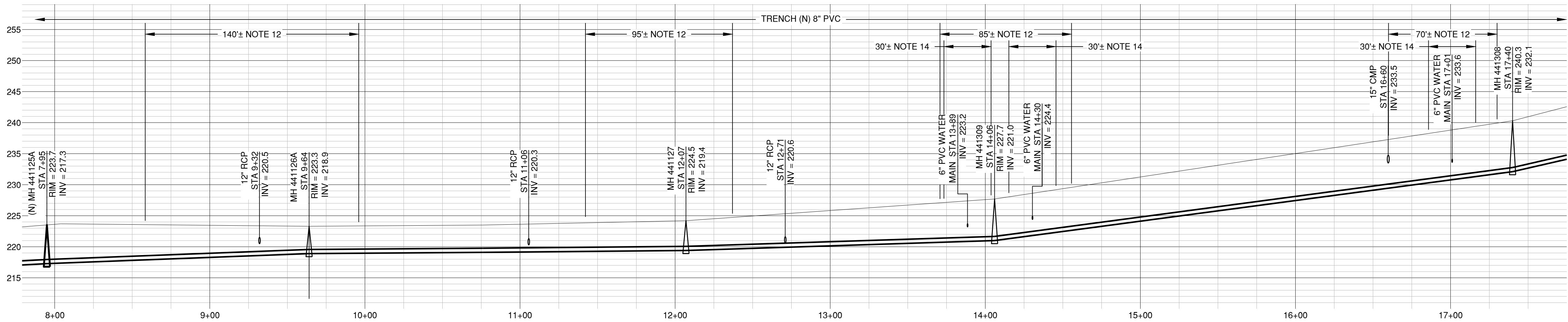


DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
NORTH RD

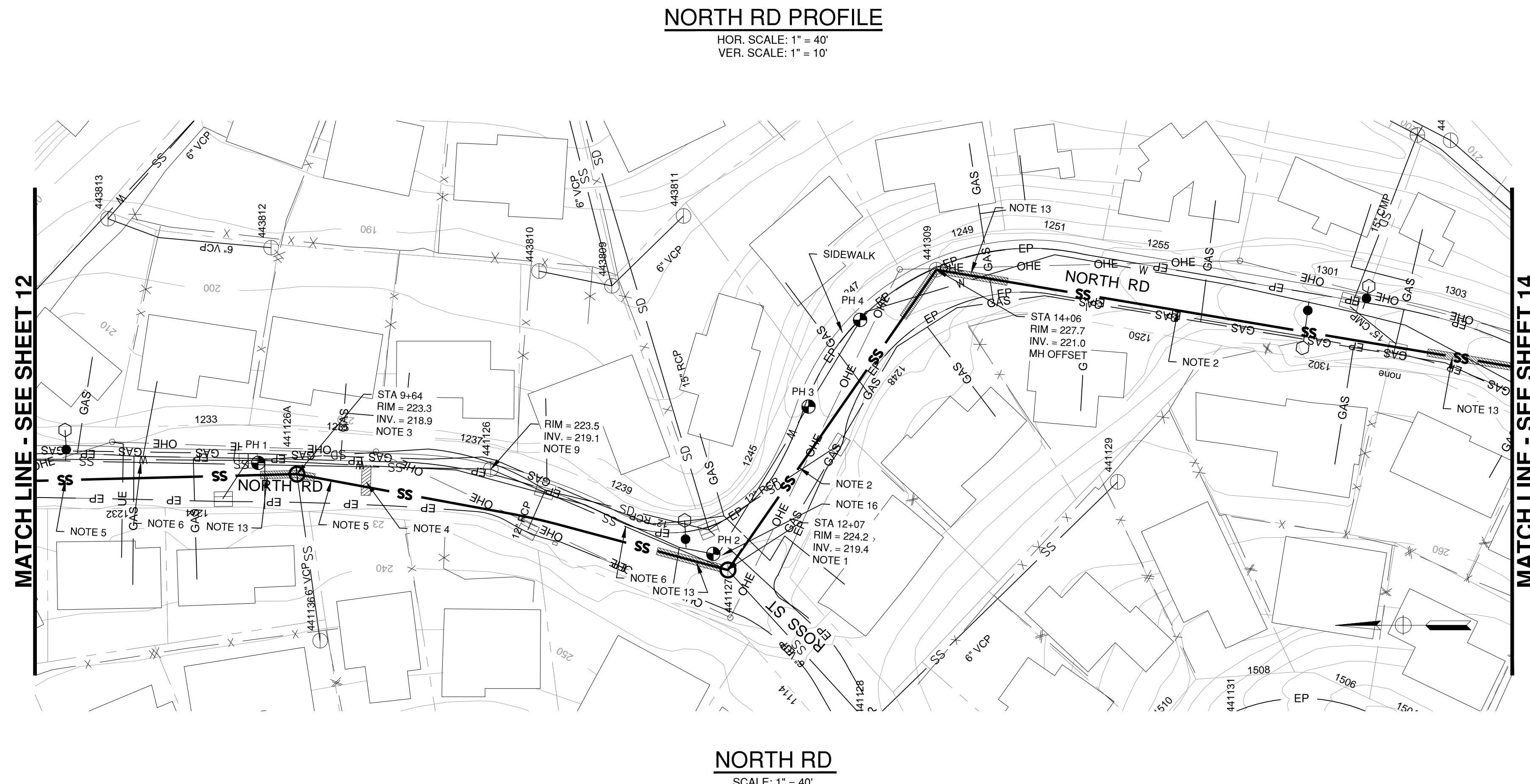
DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

**SHEET**  
**12**  
OF  
**19**

LATERAL LOCATIONS						
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL	NOTES	
441126A	441125A	8+83	RIGHT			
441126A	441125A	8+97	RIGHT			ROOTS
441127	441126A	10+25	RIGHT			
441127	441126A	10+92	RIGHT			
441127	441126A	11+87	RIGHT			
441309	441127	12+31	RIGHT			
441309	441127	13+31	RIGHT			
441308	441309	13+38	RIGHT			
441308	441309	14+71	RIGHT			
441308	441309	16+29	RIGHT			



SEWER FLOWS		
UP MH	DO MH	PDWF Q (gpm)
441127	441126	23.8 71.2
441309	441127	16.5 49.2



REVISION OF WATER MAIN SEPARATION REQUIREMENTS / INFORMATION

REVISION OF UNDERGROUND UTILITY LOCATION & POHOLE INFORMATION

NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
4			
5			
6			
7			



BELMONT, CALIFORNIA

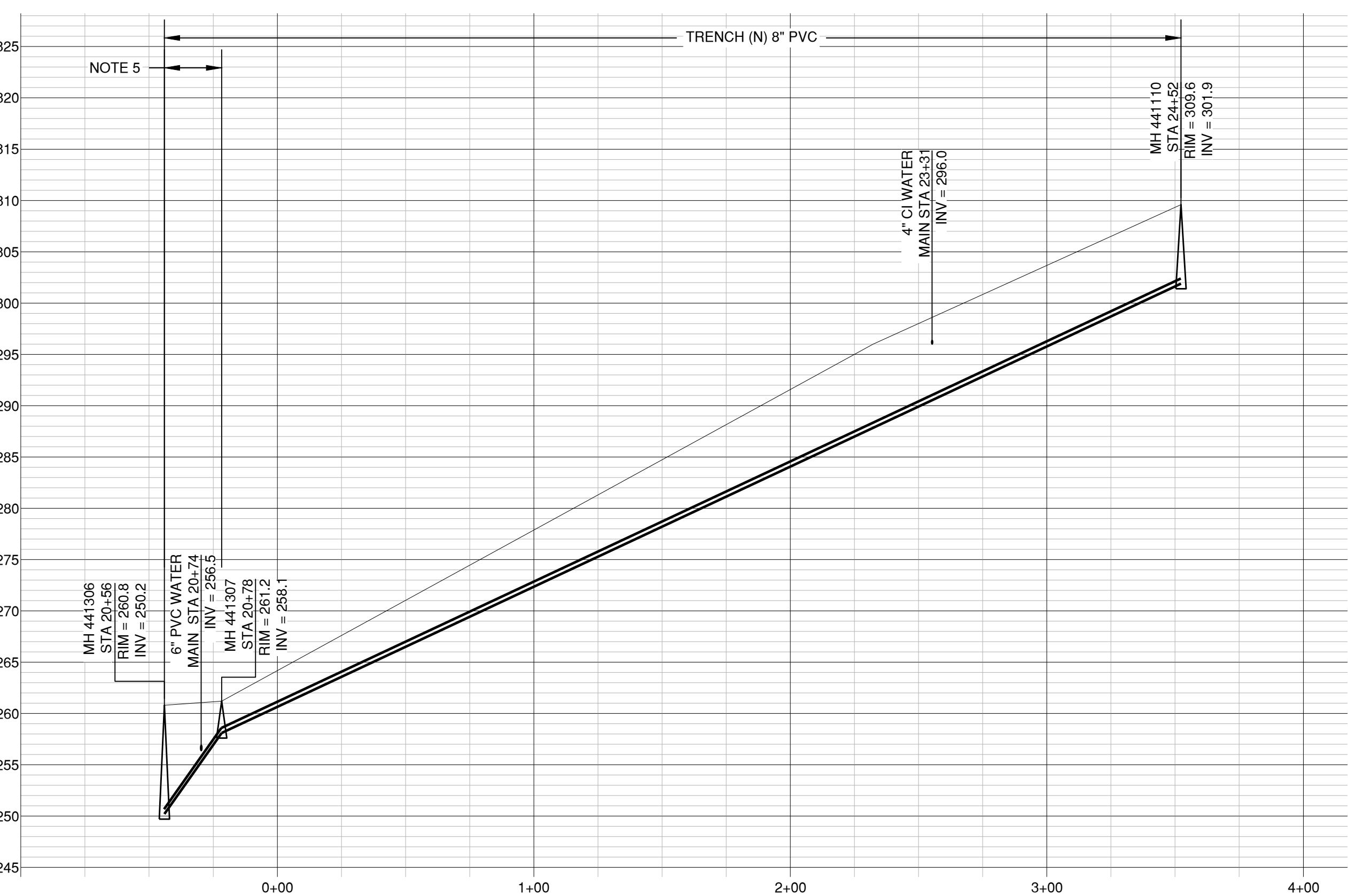
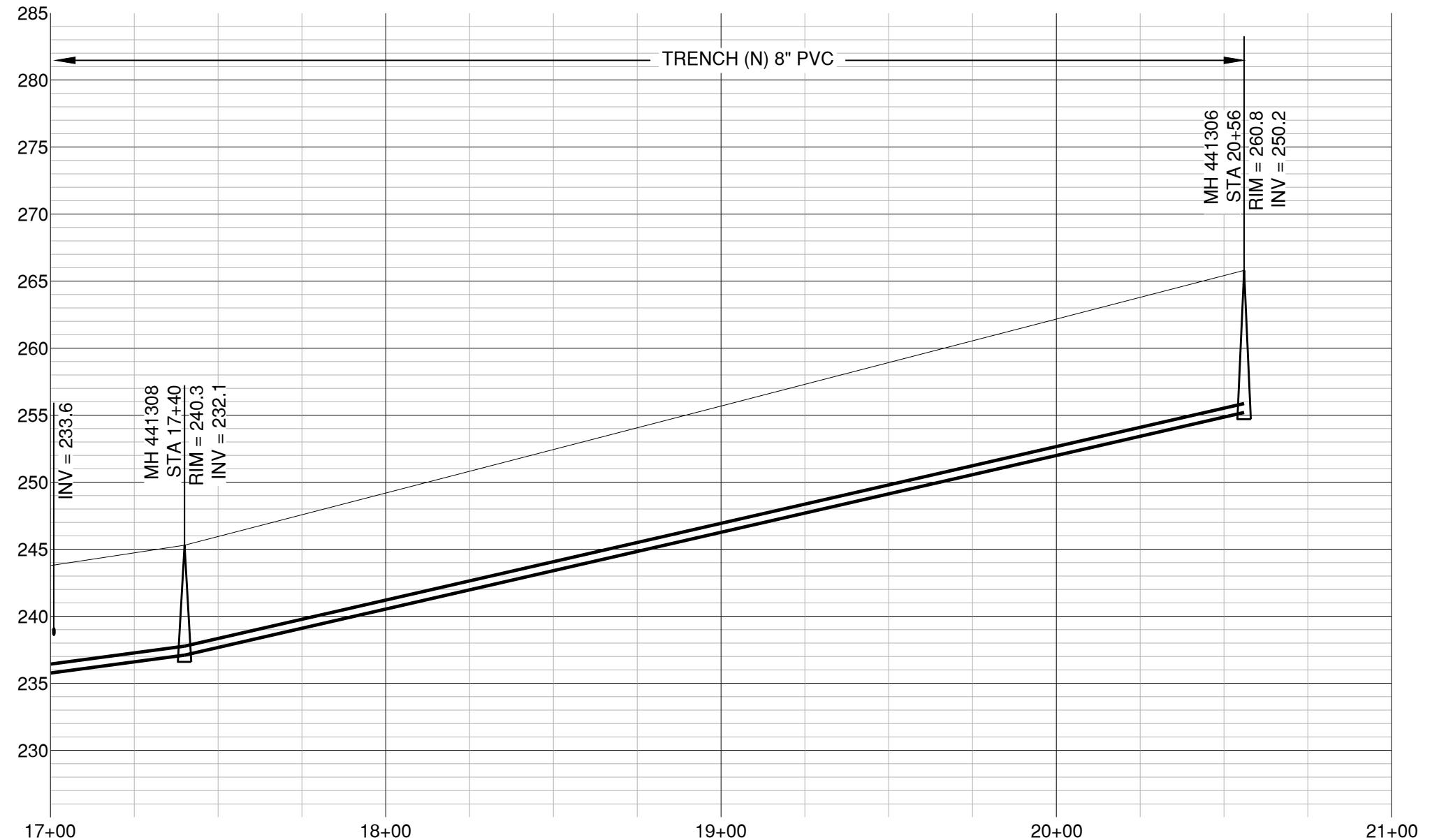
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CONSULTING CIVIL ENGINEERS  
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SANTA CLARA, CA 95050  
(408) 246-4848



DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
NORTH RD

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

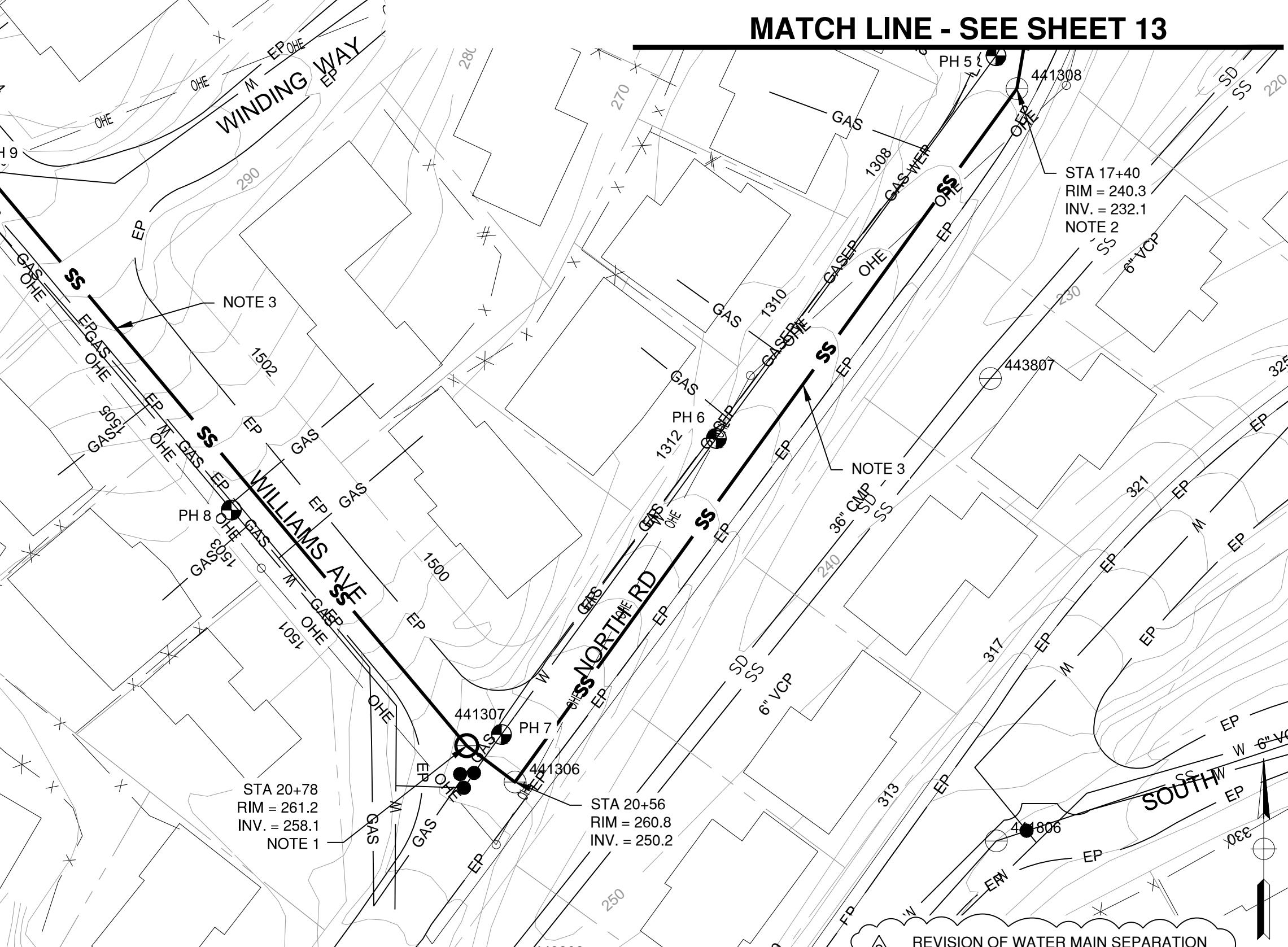
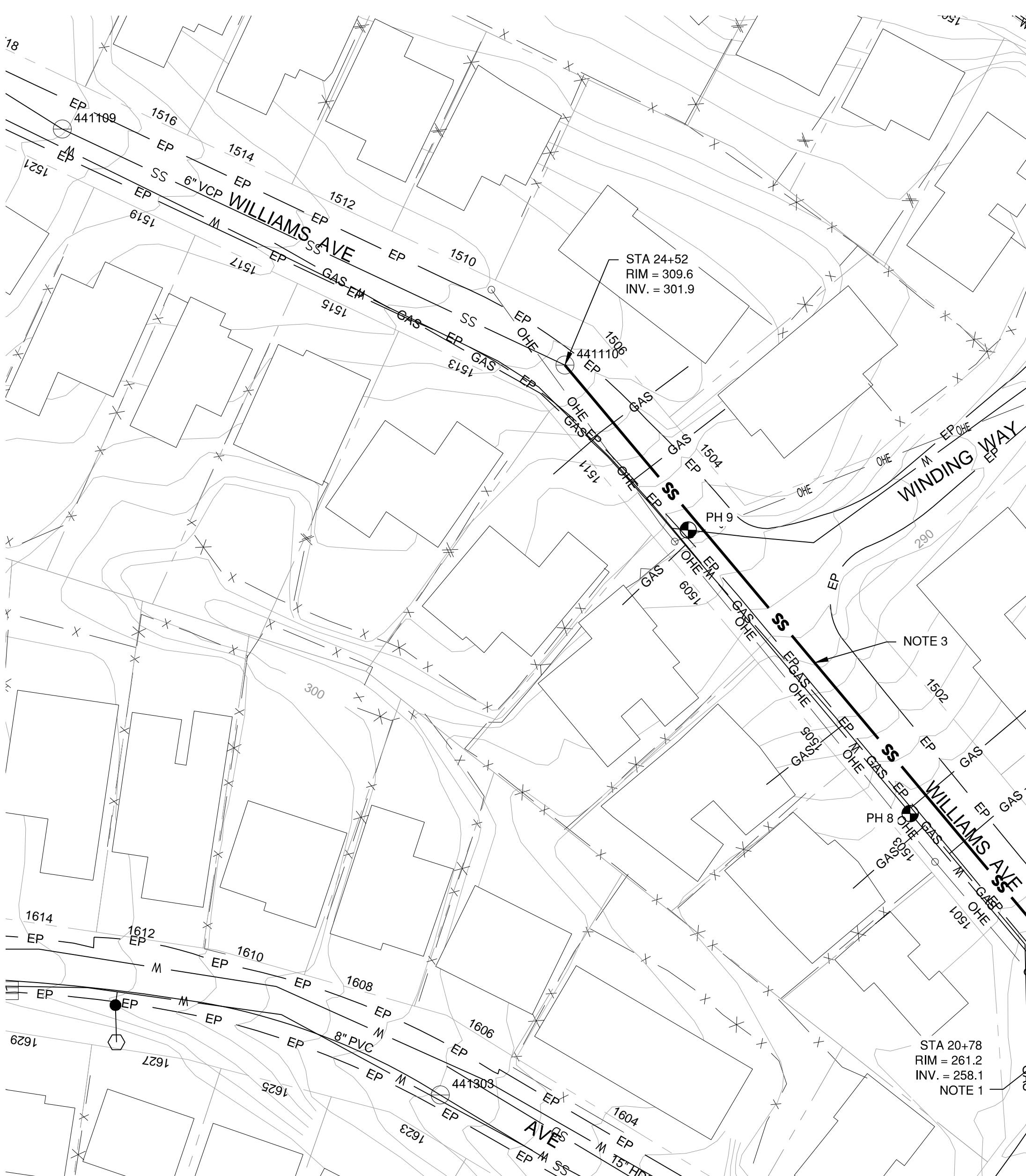
**SHEET**  
**13**  
OF  
**19**



### NOTES

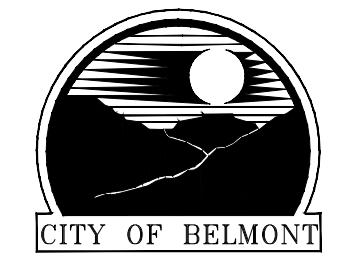
- REHABILITATE EXISTING MANHOLE PER TECHNICAL SPECIFICATIONS SECTION 09900.
- APPLY NON-SHRINK GROUT AT JOINTS ALONG CONE OF MH.
- REMOVE (E) 6" VCP & INSTALL (N) 8" PVC W/ OPEN TRENCH CONSTRUCTION.
- LATERAL MIGHT BE CAPPED. CONTRACTOR TO ABANDON LATERAL LOCATION IF PRE-INSPECTION VIDEO SHOWS LATERAL IS CAPPED.
- BACKFILL WITH CDF PER WATER SEPARATION NOTES ON SHEET 2.
- WATER MAIN STATIC PRESSURES RANGE FROM 75 TO 85 PSI.

LATERAL LOCATIONS					
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL	NOTES
441306	441308	17+49	RIGHT		
441306	441308	17+55	LEFT		
441306	441308	17+61	RIGHT		
441306	441308	18+14	LEFT		ROOTS
441306	441308	18+20	RIGHT		ABANDONED?
441306	441308	18+15	LEFT		ABANDONED?
441306	441308	18+91	RIGHT		
441306	441308	19+57	LEFT		
441306	441308	20+38	LEFT		
441110	441307	21+04	LEFT		
441110	441307	21+05	RIGHT		
441110	441307	21+80	LEFT		CAPPED
441110	441307	21+86	LEFT		CAPPED
441110	441307	21+90	RIGHT		CAPPED
441110	441307	22+44	LEFT		CAPPED
441110	441307	22+73	LEFT		CAPPED
441110	441307	22+90	RIGHT		CAPPED
441110	441307	22+98	LEFT		CAPPED
441110	441307	23+50	LEFT		CAPPED
441110	441307	23+53	RIGHT		CAPPED
441110	441307	23+77	RIGHT		
441110	441307	23+81	LEFT		
441110	441307	24+25	LEFT		



**NORTH RD & WILLIAMS AVE**  
SCALE: 1" = 40'

NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
4			
5			
6			
7			
8			



BELMONT, CALIFORNIA

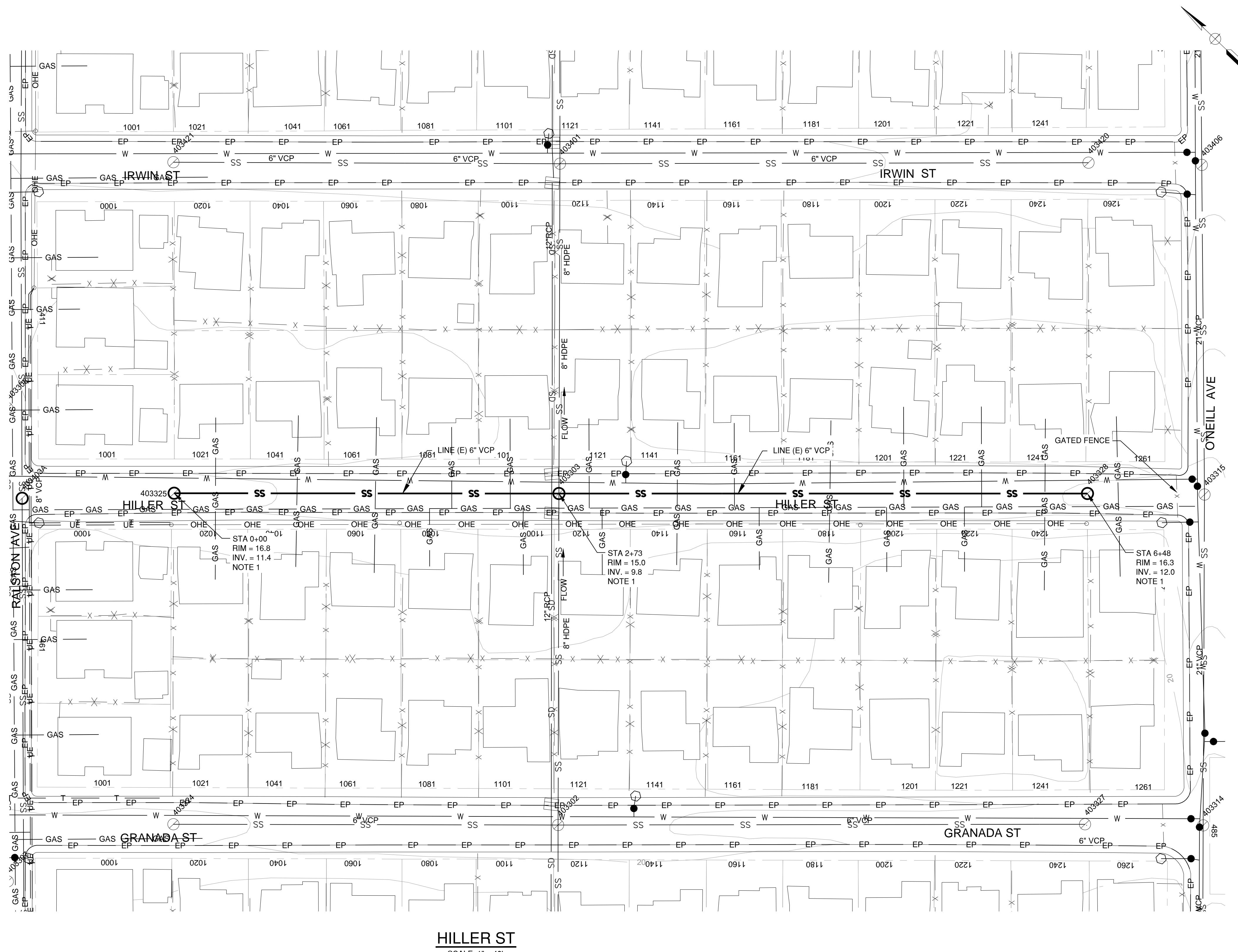
**Schaaf & Wheeler**  
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SANTA CLARA, CA 95050  
(408) 246-4848



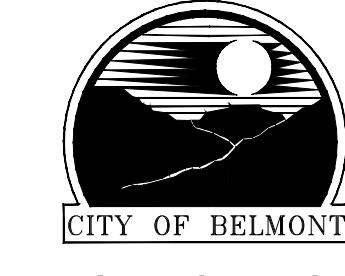
DEPT. OF PUBLIC WORKS CCN 2015-534  
**2015 SEWER**  
**REHABILITATION PROJECT**  
**NORTH RD & WILLIAMS AVE**

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

**SHEET**  
**14**  
OF  
**19**



NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
4			
5			
6			
7			



BELMONT, CALIFORNIA

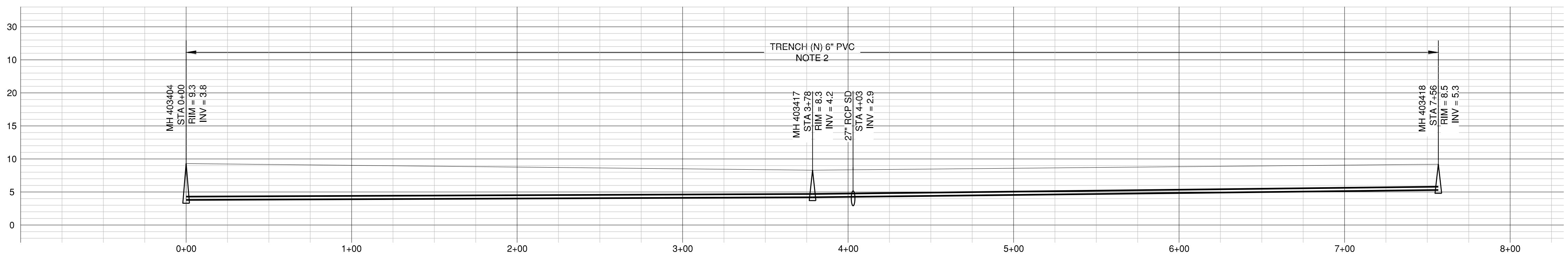
**Schaaf & Wheeler**  
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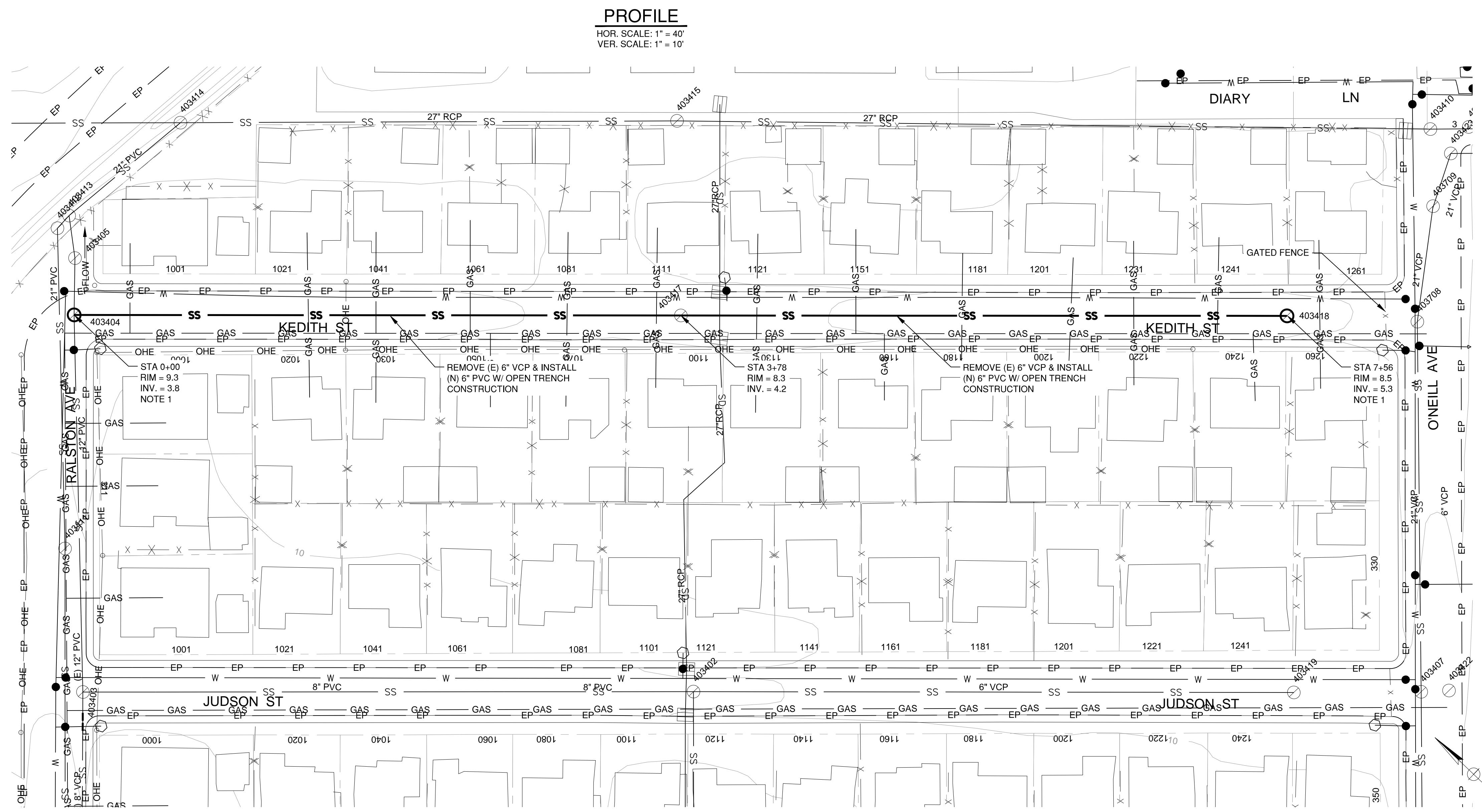
DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
HILLER ST

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

**SHEET**  
**15**  
OF  
**19**



LATERAL LOCATIONS					
UP MH	DO MH	APPROXIMATE STA	SIDE	LATERAL	NOTES
403417	403404	0+00 TO 0+74			CAMERA UNDERWATER
403417	403404	1+04	LEFT		
403417	403404	1+06	RIGHT		
403417	403404	1+62	RIGHT		CAPPED
403417	403404	2+03	RIGHT		
403417	403404	2+06	LEFT		
403417	403404	2+14	LEFT		
403417	403404	2+74	RIGHT		
403417	403404	2+85	LEFT		
403417	403404	3+26	RIGHT		
403418	403417	3+85	RIGHT		
403418	403417	4+42	RIGHT		
403418	403417	4+53	RIGHT		
403418	403417	5+09	RIGHT		
403418	403417	5+59	RIGHT		
403418	403417	5+60	RIGHT		
403418	403417	6+22	RIGHT		
403418	403417	6+25	RIGHT		
403418	403417	6+75	RIGHT		
403418	403417	6+77	RIGHT		
403418	403417	6+84	RIGHT		
403418	403417	7+41	RIGHT		



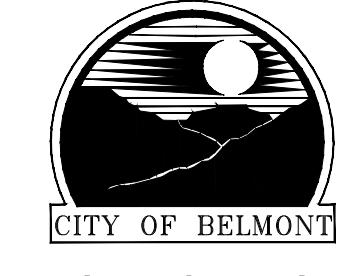
SEWER FLOWS		
UP MH	DO MH	PDWF PWWF
403417	403404	1.6 10.6

#### NOTES

1. REHABILITATE EXISTING MANHOLE PER TECHNICAL SPECIFICATIONS SECTION 09900.
2. (N) SEWER MAIN ON KEDITH STREET SHALL BE CONSTRUCTED PER DETAIL 5 ON SHEET 18.

REVISION OF UNDERGROUND UTILITY LOCATION

NO	REVISIONS	DATE	APPR
▲	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
▲	WATER SEPARATION	7/15/15	BLS
▲			
▲			
▲			
▲			
▲			
▲			



BELMONT, CALIFORNIA

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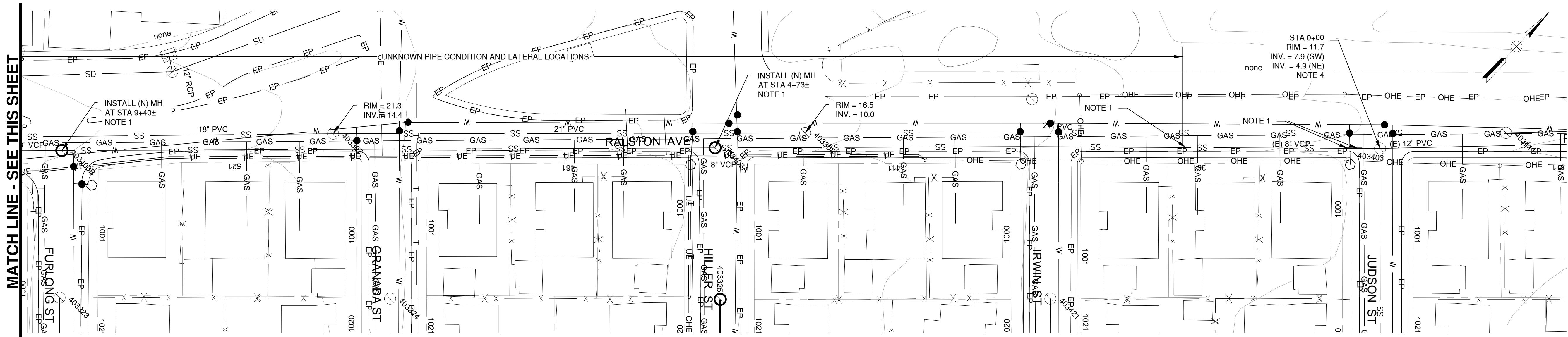
DEPT. OF PUBLIC WORKS CCN 2015-534  
**2015 SEWER**  
**REHABILITATION PROJECT**  
**KEDITH ST**

DATE: 5/29/15  
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DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

**SHEET**  
**16**  
OF  
**19**

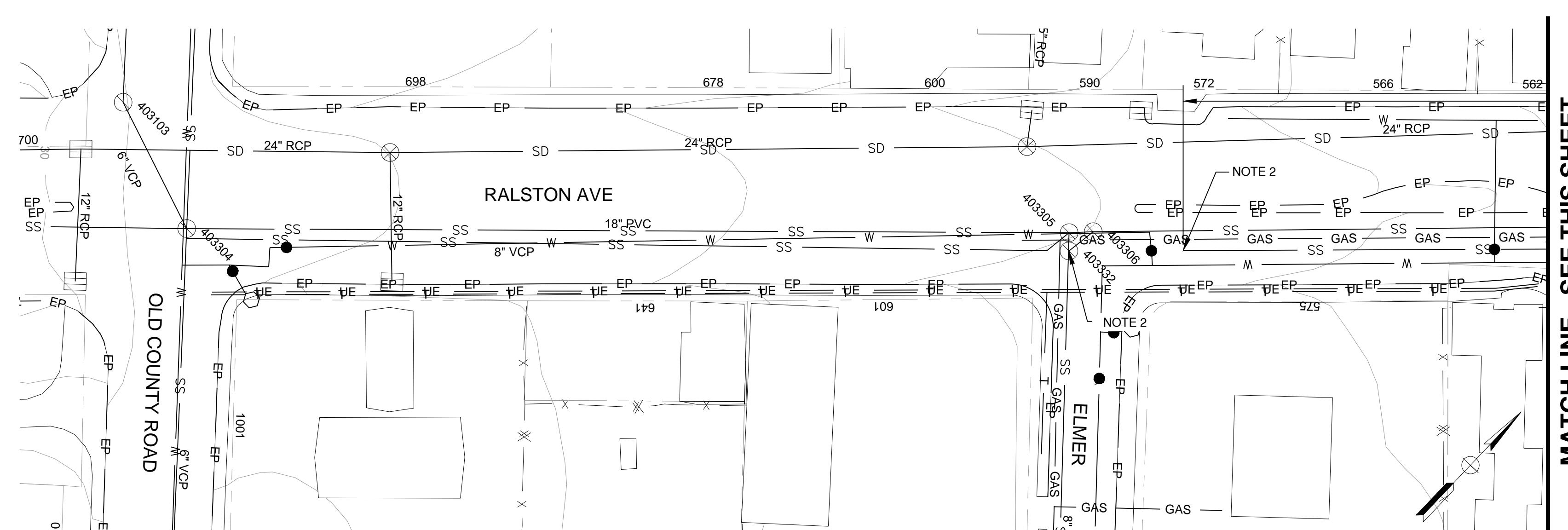
**NOTES**

1. CONTRACTOR SHALL REPAIR SECTION AT STA 1+36± PER DETAIL 8 ON SHEET 18, CCTV VIDEO THE ENTIRE ESTIMATED 1080 FT SEWER LENGTH BETWEEN MH 403403 AND MH 40332 AND SUBMIT IT TO THE CITY FOR REVIEW. AFTER CITY ENGINEER HAS REVIEWED THE VIDEO AND PROVIDED WRITTEN AUTHORIZATION TO PROCEED, MAKE SPOT REPAIRS AT STA 0+13± AND STA 0+18± PER DETAIL 8 ON SHEET 18 AND INSTALL MANHOLES AT STA 4+73 AND 9+40 PER DETAIL 1 ON SHEET 18.
2. 8 INCH RALSTON SEWER DOES NOT GO THROUGH MH 403332.
3. SEWER LATERAL LEFT AT STA 0+73±, ADDITIONAL LATERALS MAY EXIST BEYOND STA 1+36±.
4. REMOVE MH LADDER RUNGS AND REHABILITATE EXISTING MANHOLE PER TECHNICAL SPECIFICATIONS SECTION 09900.



**361 RALSTON AVE**

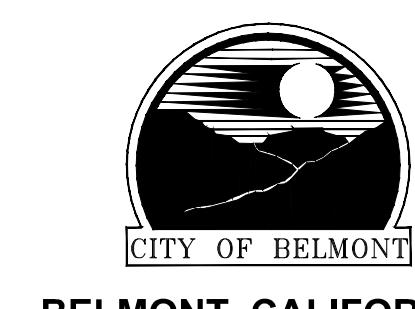
SCALE: 1" = 40'



**361 RALSTON AVE**

SCALE: 1" = 40'

NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
4			
5			
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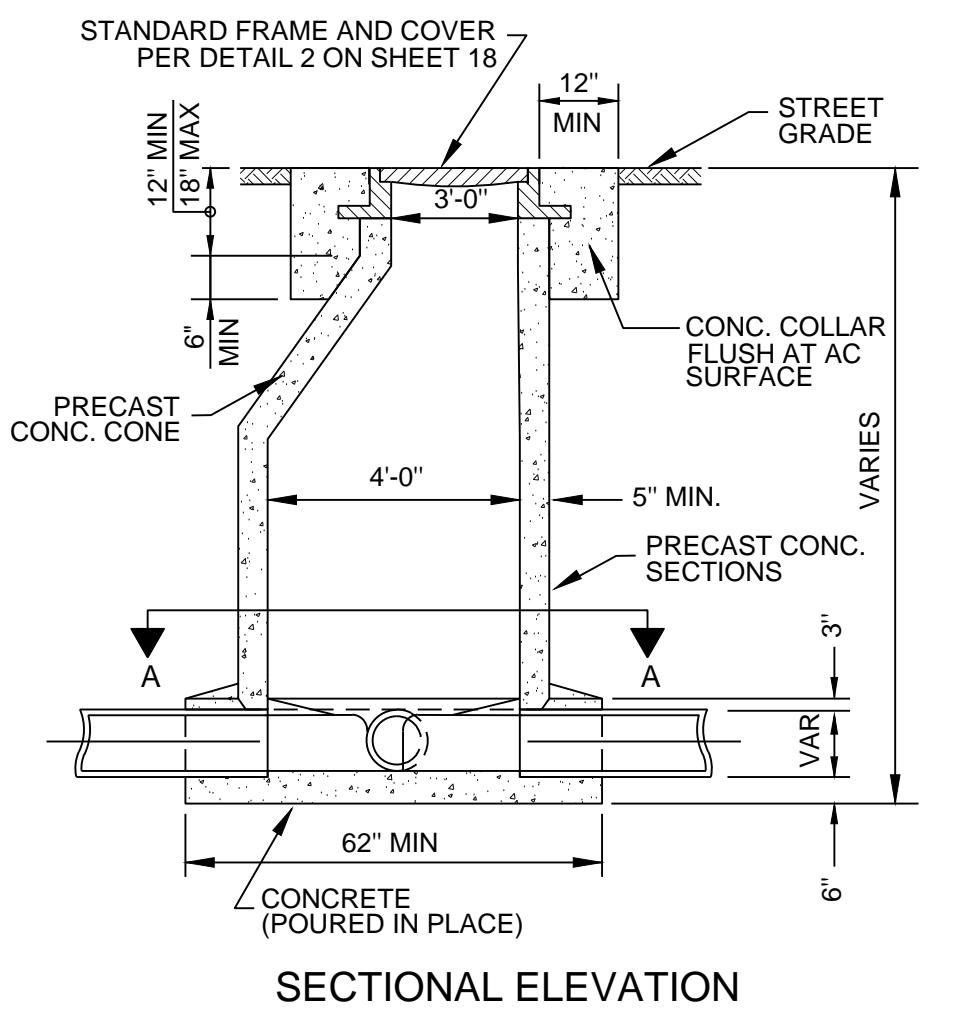


6/02/15

DEPT. OF PUBLIC WORKS CCN 2015-534  
**2015 SEWER  
REHABILITATION PROJECT  
361 RALSTON AVE**

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
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**SHEET**  
**17**  
OF  
**19**

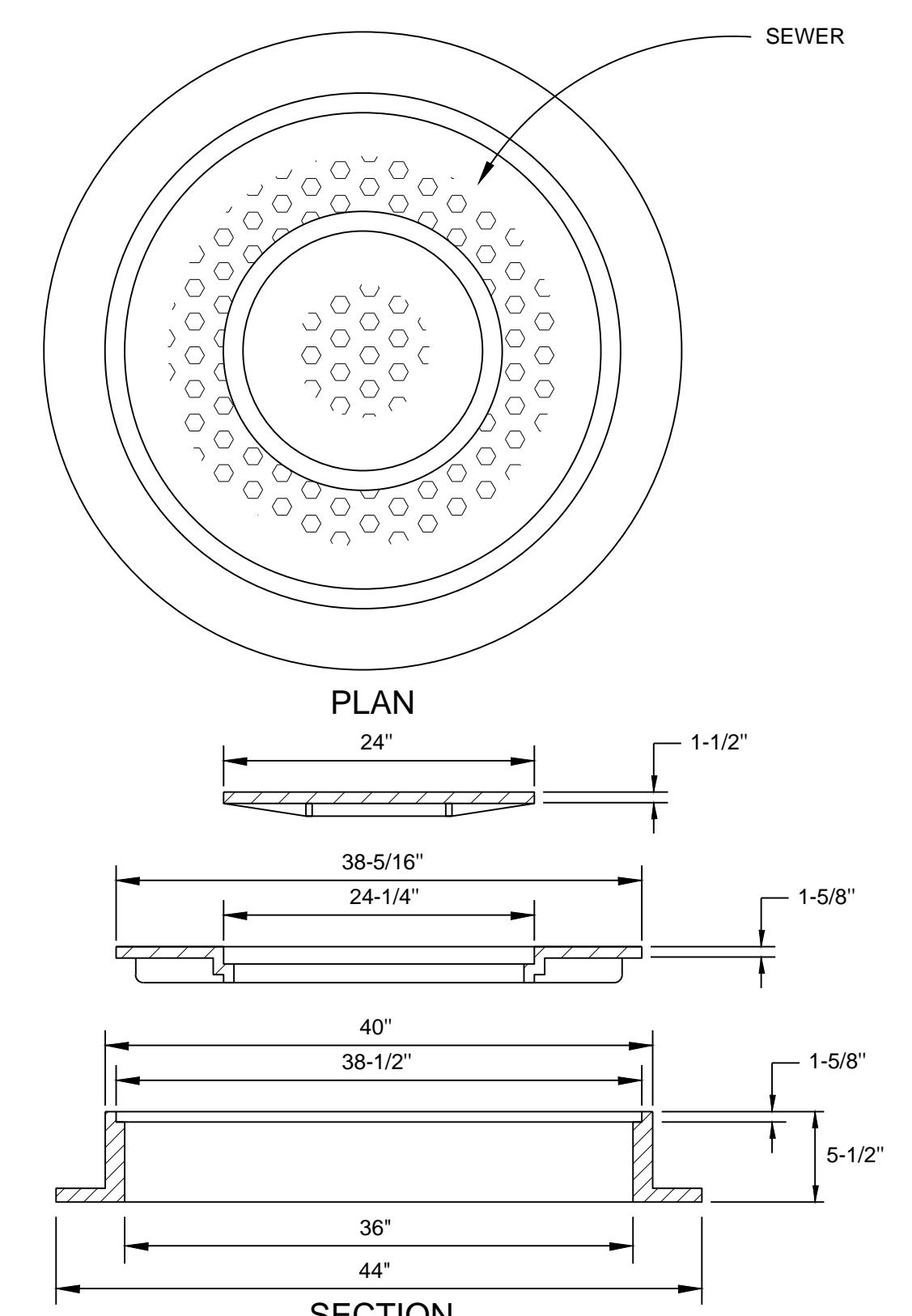


**NOTES:**

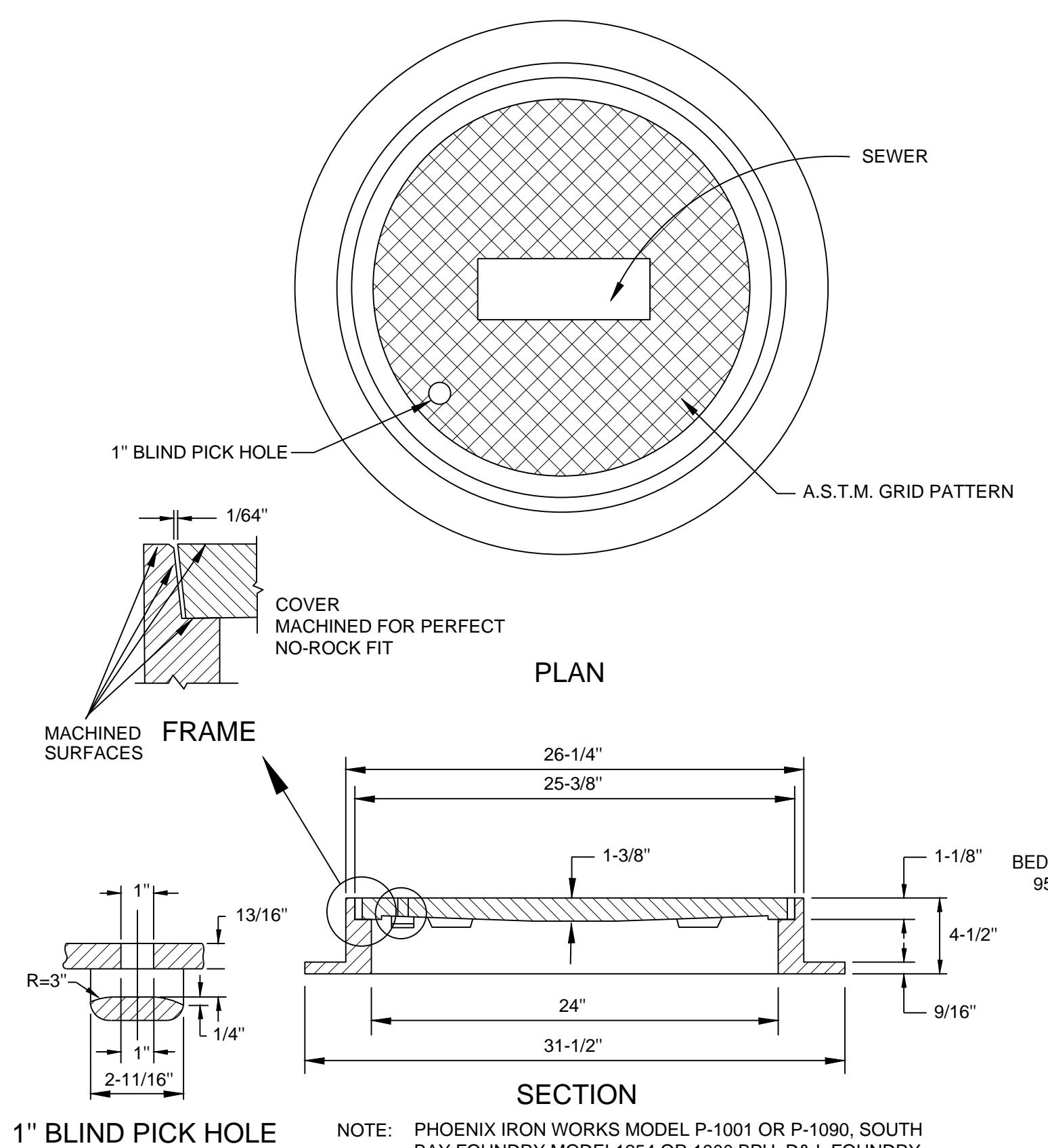
1. NEW MANHOLES SHALL BE ECCENTRIC WHEREVER POSSIBLE. EXISTING MANHOLES ARE CONCENTRIC UNLESS OTHERWISE NOTED ON THE PLANS.
2. TAPER "SHELF" 1/2" PER FOOT TOWARDS CHANNEL.
3. REFER TO SPECIFICATIONS FOR MANHOLE PIPE CONNECTION.

**SECTION A-A**

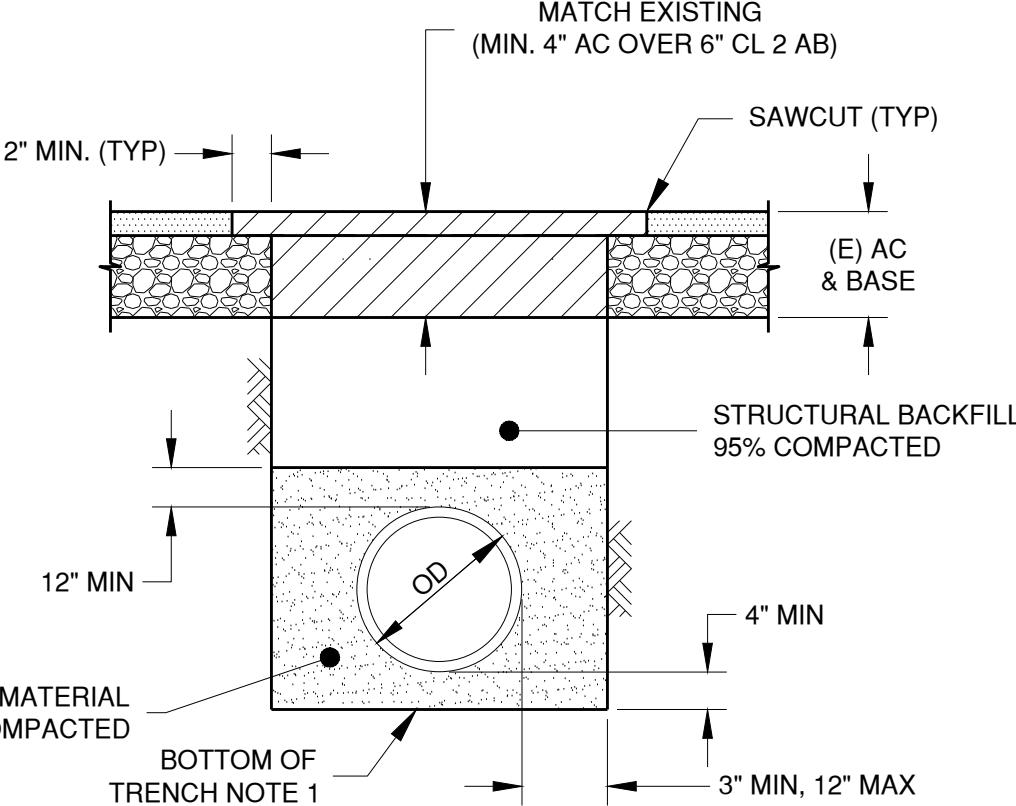
**PRE-CAST MANHOLE** 1  
SCALE: NTS



**36" MANHOLE FRAME & COVER** 2  
SCALE: NTS



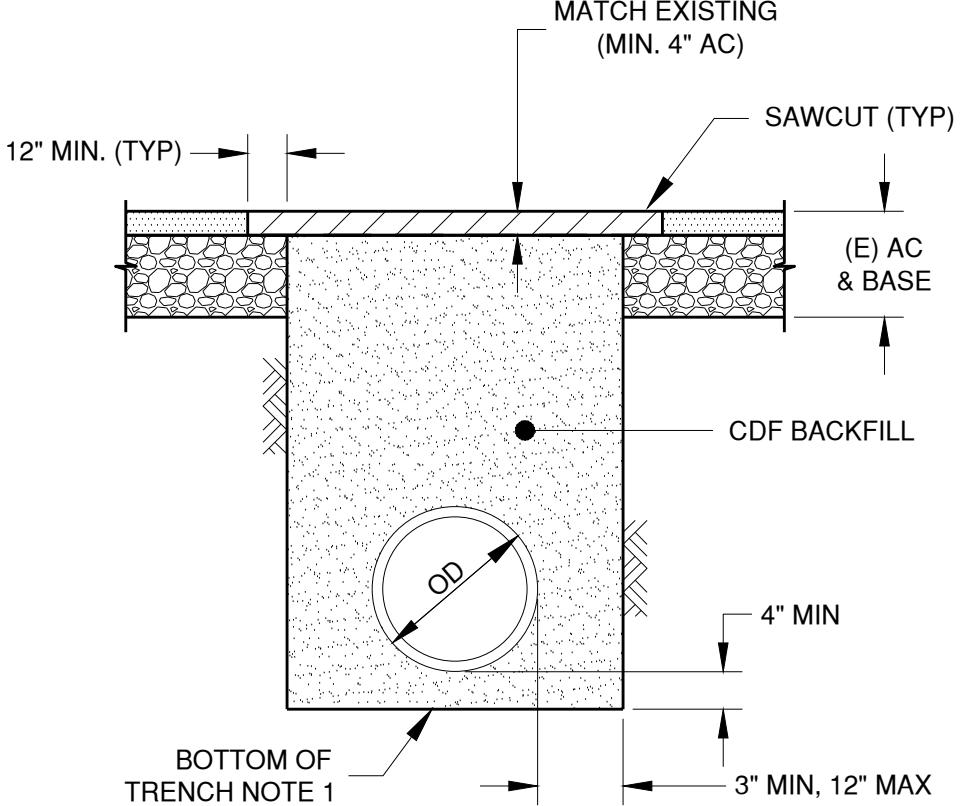
**24" MANHOLE FRAME & COVER** 3  
SCALE: NTS



**NOTES:**

1. IF SOFT SOILS ARE ENCOUNTERED EXCAVATE 12" BELOW PIPE AND INSTALL GEOTEXTILE FABRIC PER SPECIFICATION SECTION 02200.
2. CONTRACTOR'S OPTION TO USE CDF BACKFILL PER DETAIL 5 ON SHEET 18.

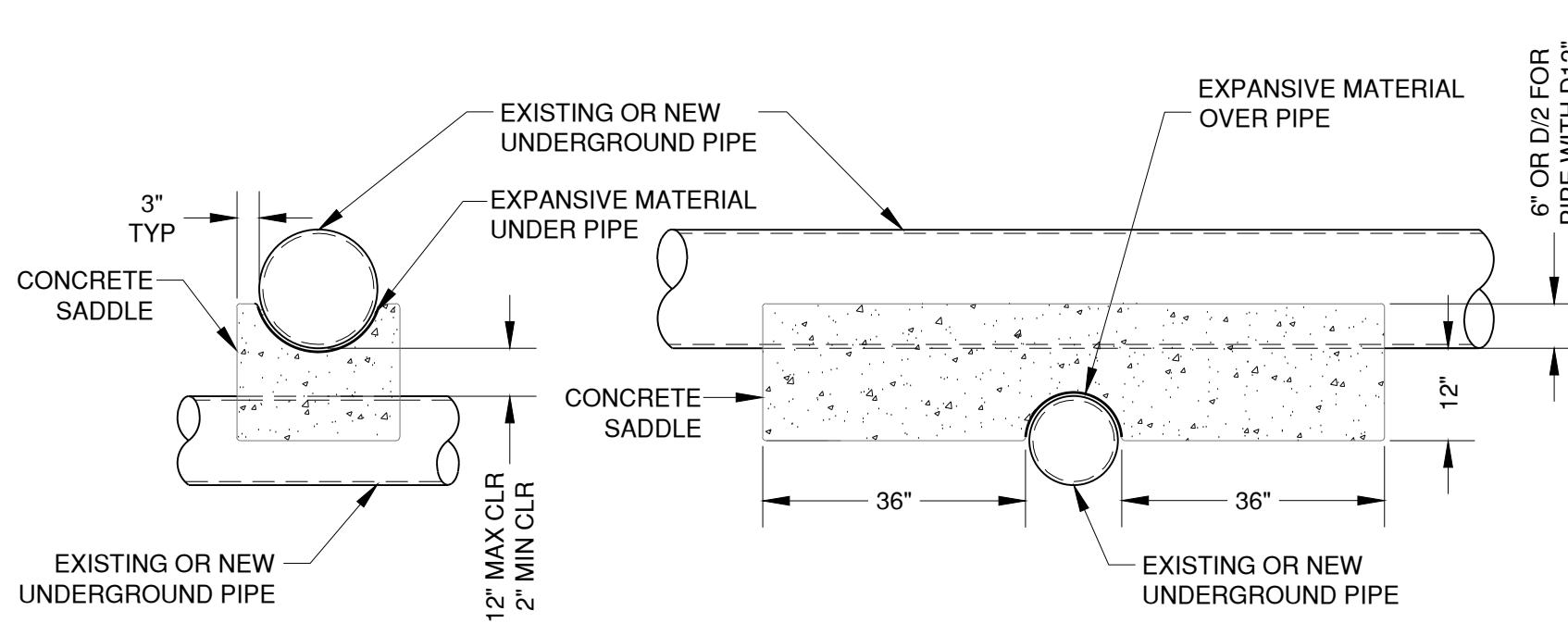
**STANDARD TRENCH** 4  
SCALE: NTS



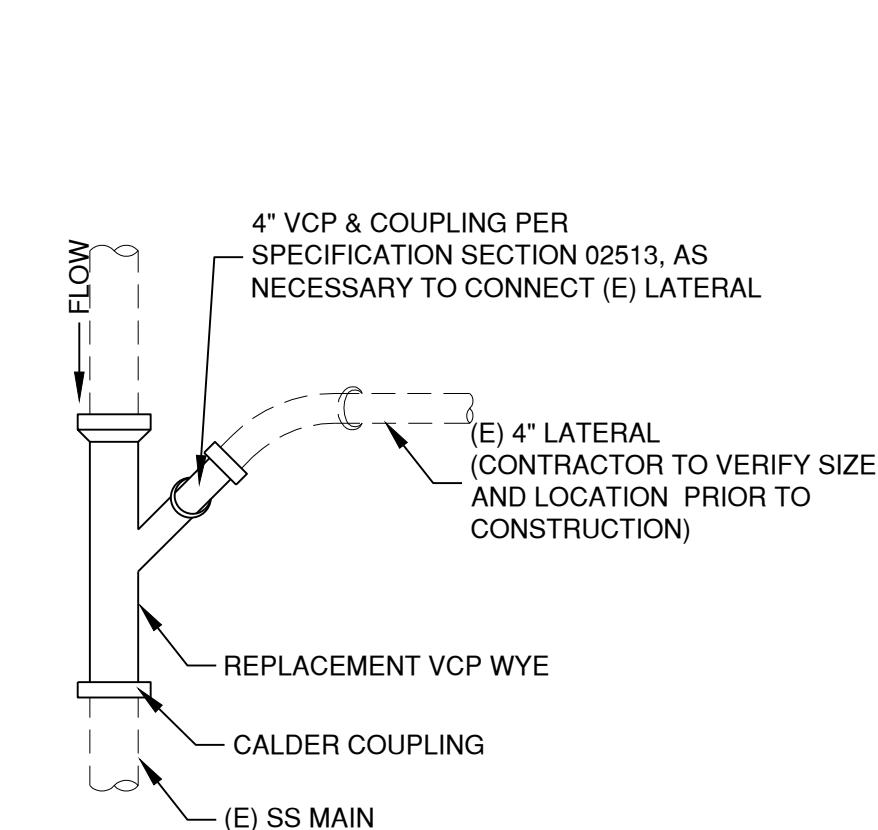
**NOTES:**

1. IF SOFT SOILS ARE ENCOUNTERED EXCAVATE 12" BELOW PIPE.

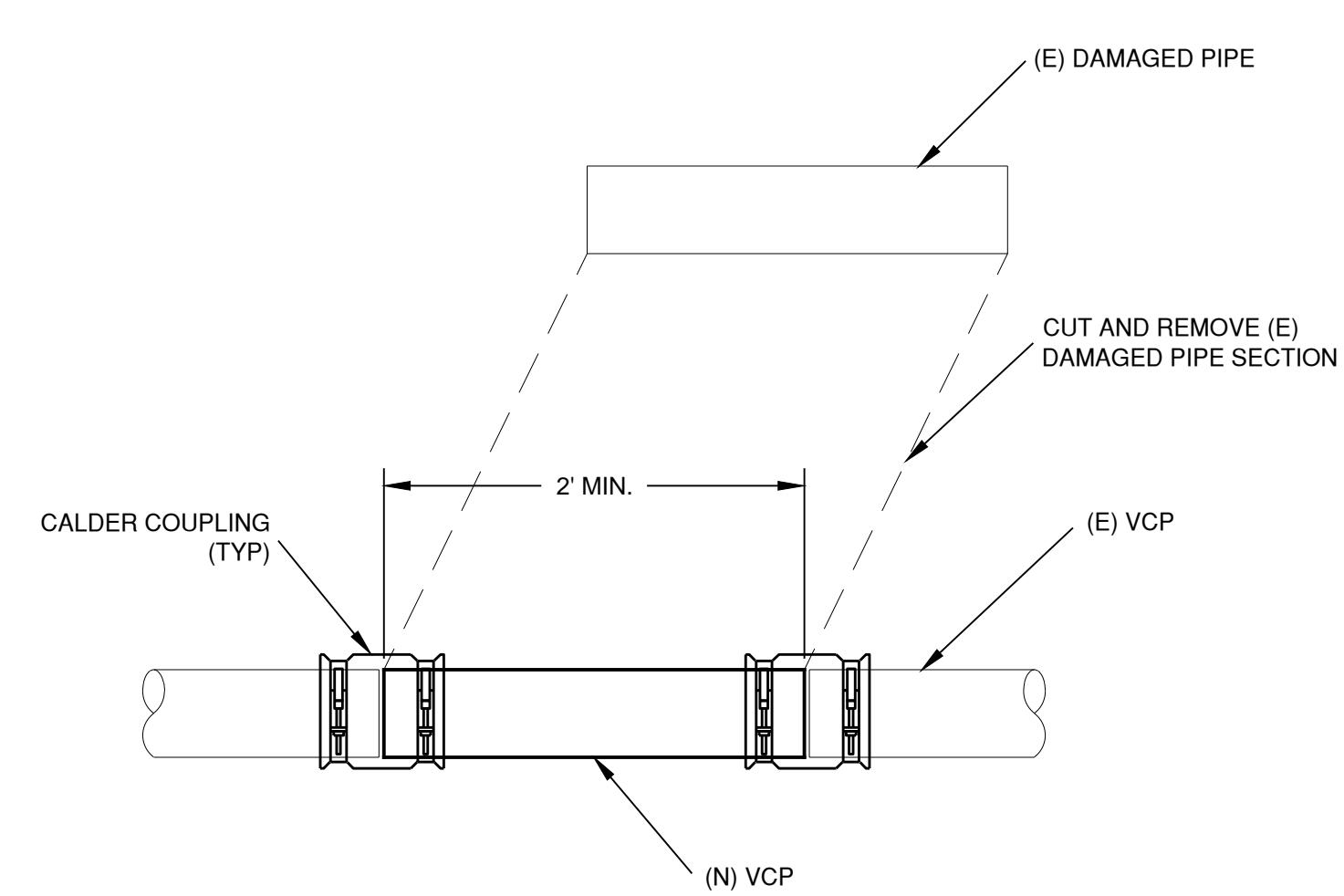
**CDF TRENCH** 5  
SCALE: NTS



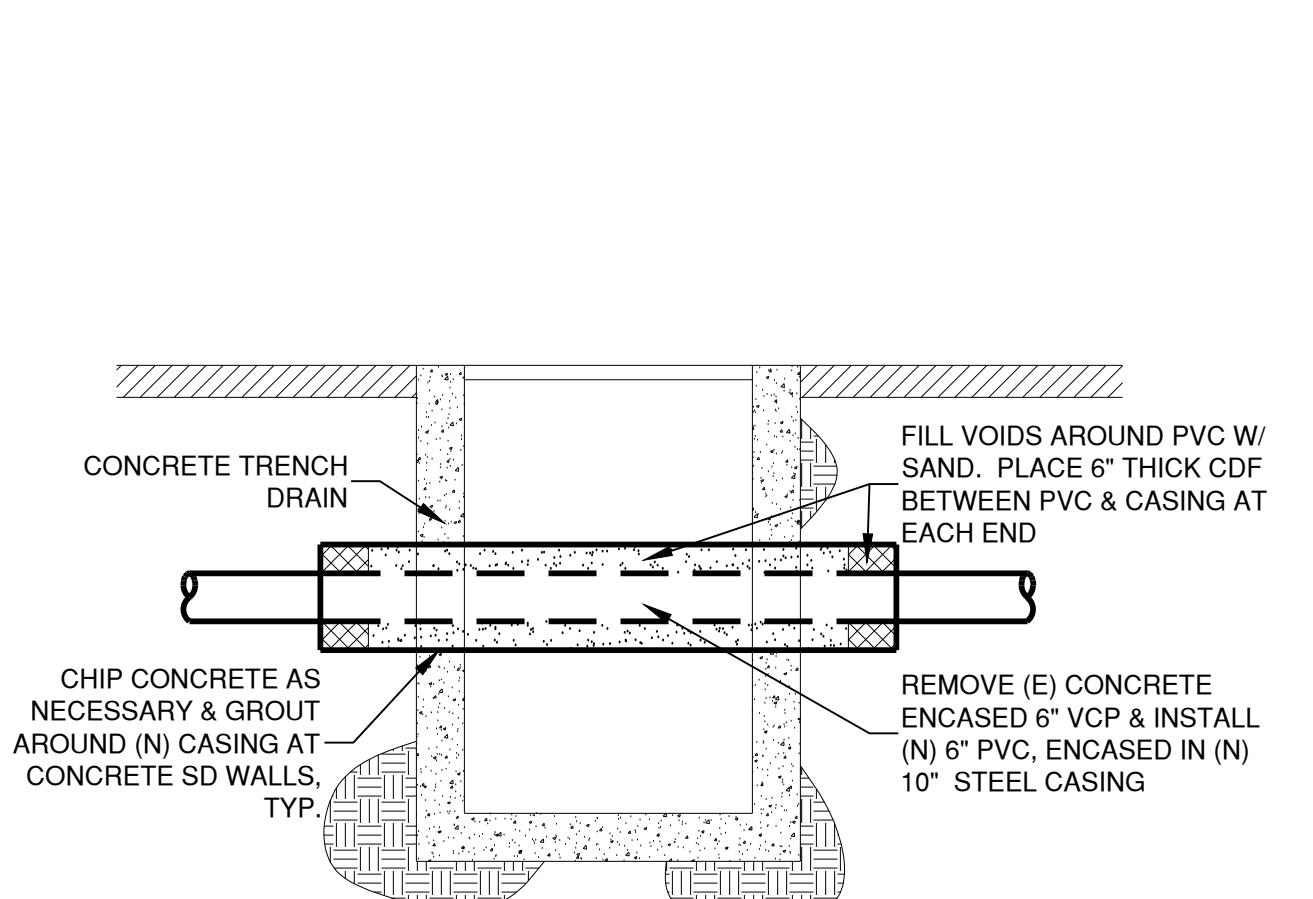
**CONCRETE SADDLE** 6  
SCALE: NTS



**LATERAL REPAIR** 7  
SCALE: NTS

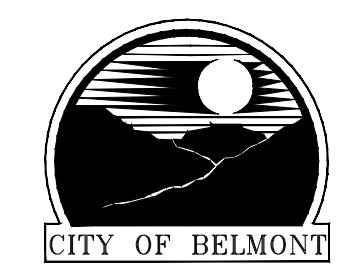


**SPOT REPAIR** 8  
SCALE: NTS



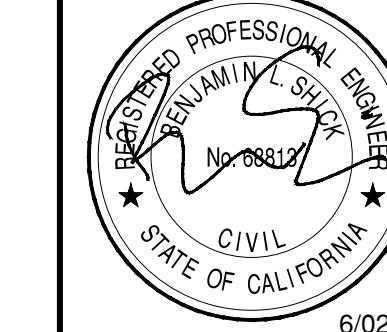
**CULVERT CROSSING** 9  
SCALE: NTS

NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
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BELMONT, CALIFORNIA

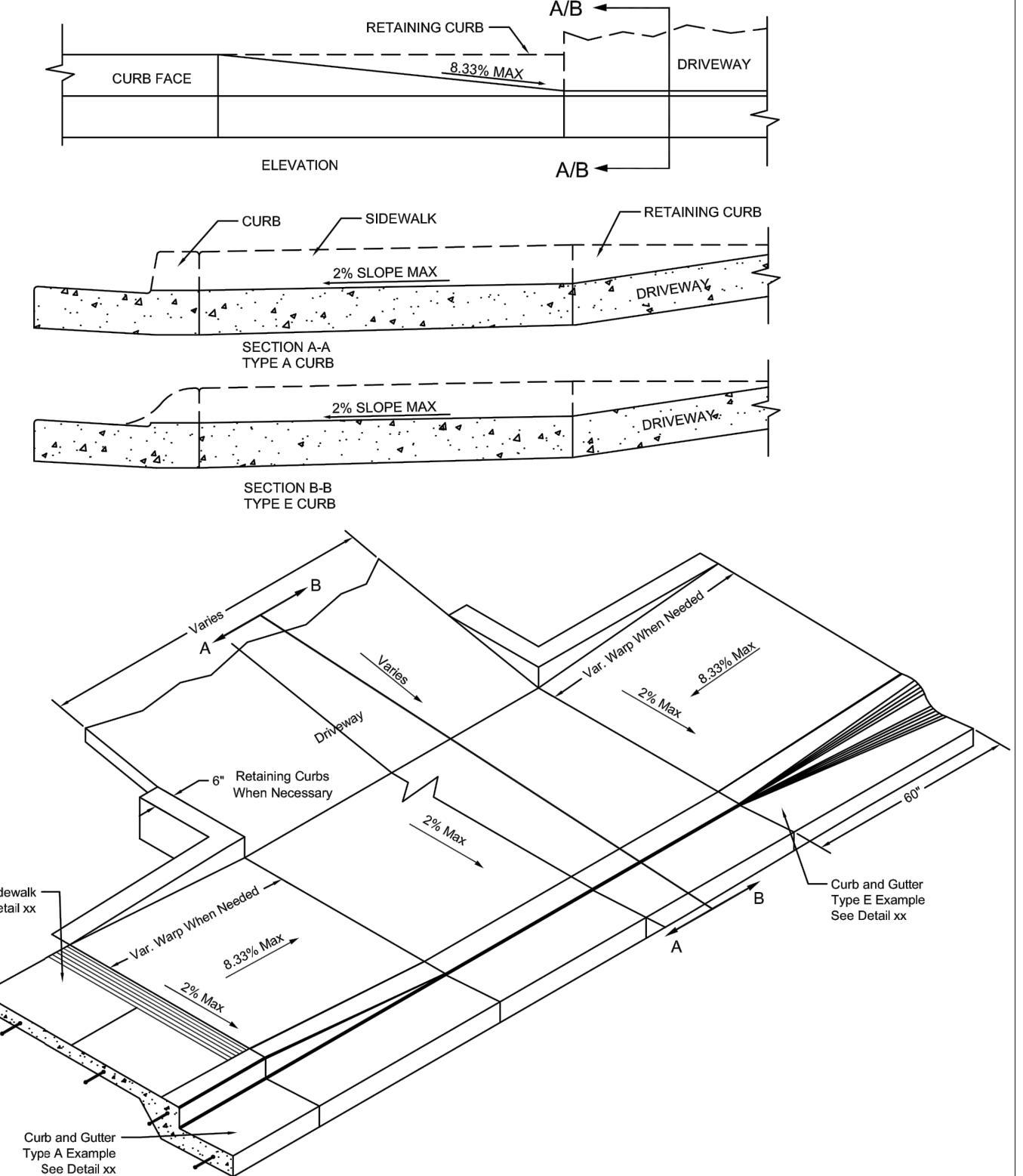
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DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
DETAILS

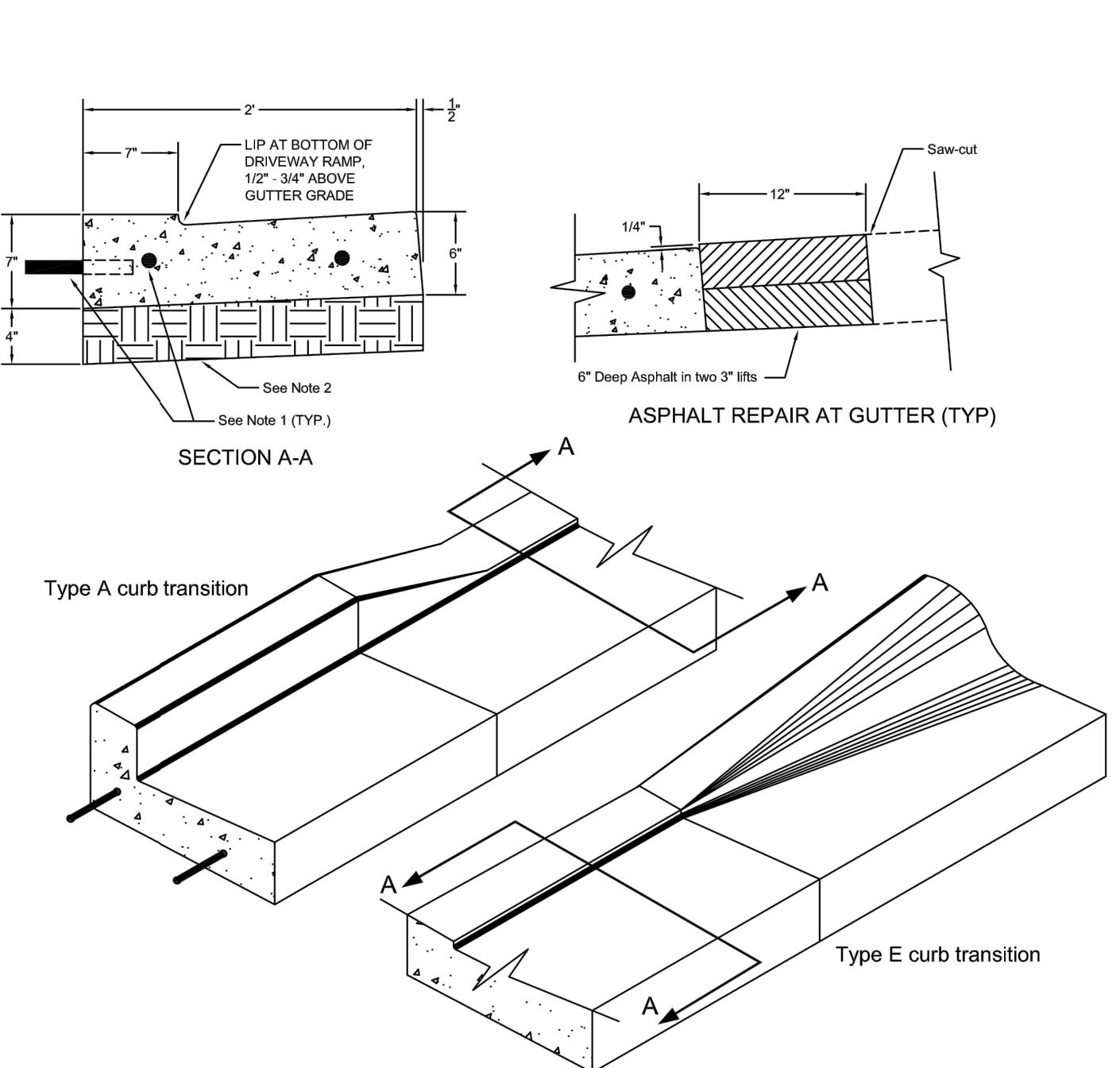
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**SHEET**  
**18**  
OF  
**19**



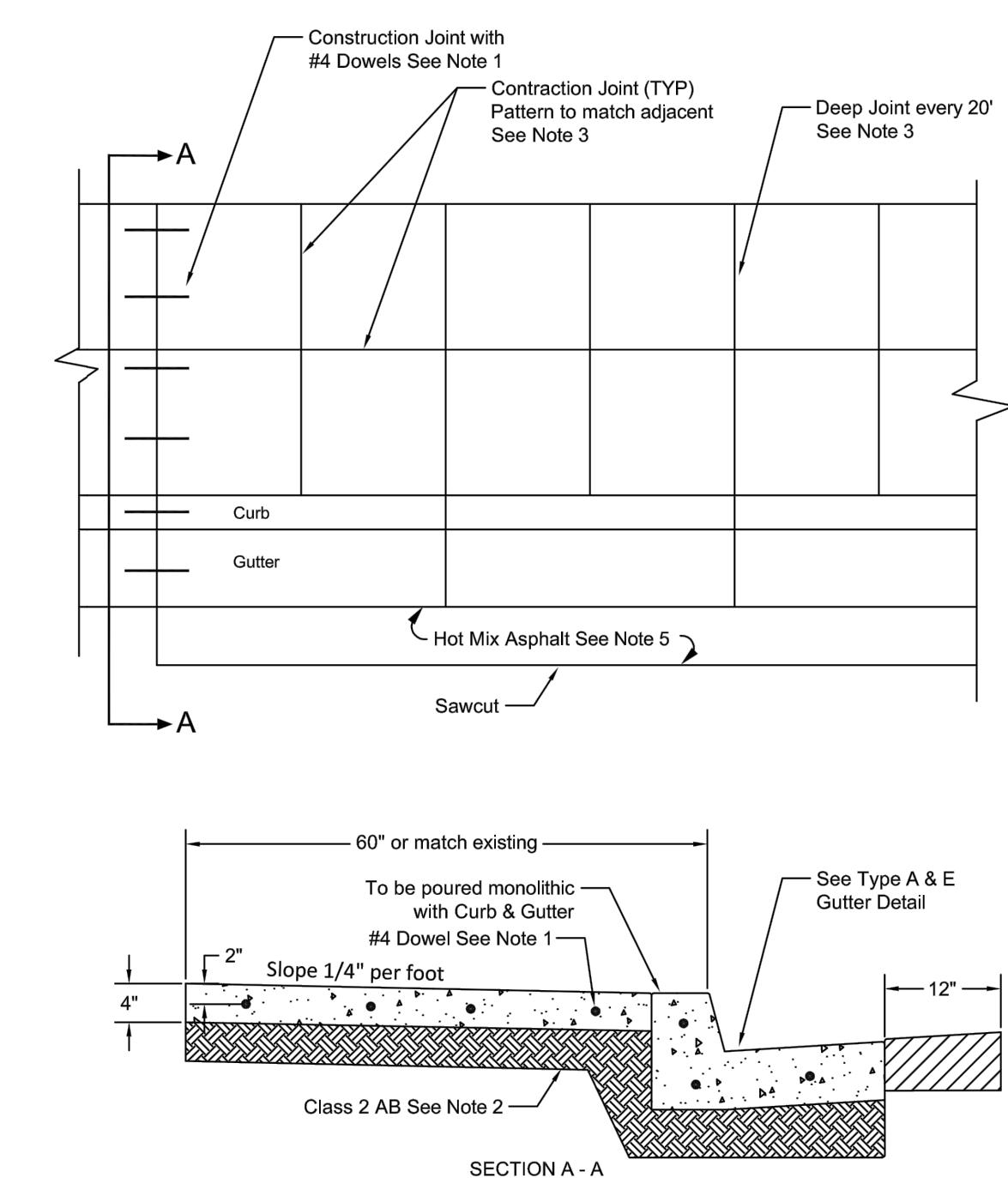
**GENERAL NOTES**

1. #4 REBAR DOWELS, 6" MINIMUM DEPTH INTO EXISTING SIDEWALK, CURB & GUTTER. DO NOT DOWEL PRIVATE IMPROVEMENTS INTO PUBLIC IMPROVEMENTS.
2. 4" MINIMUM CLASS 2 A.B. COMPACTED TO 90%.
3. 1/2" DEEP CONTRACTION JOINTS AT 20', 1/4" DEEP CONTRACTION JOINTS AT 10'
4. ALL CONCRETE SHALL BE 6 SACK 3/4" WITH ONE POUND OF LAMP BLACK PER CUBIC YARD FINISH TO BE UNIFORM FINE BROODED TEXTURE
5. DRIVEWAYS USING MATERIAL OTHER THAN ASPHALT OR NON TEXTURED CONCRETE MAY REQUIRE AN ADMINISTRATIVE PERMIT. CHECK WITH ENGINEERING.
6. ASPHALT TO BE HMA 1/2" FINE



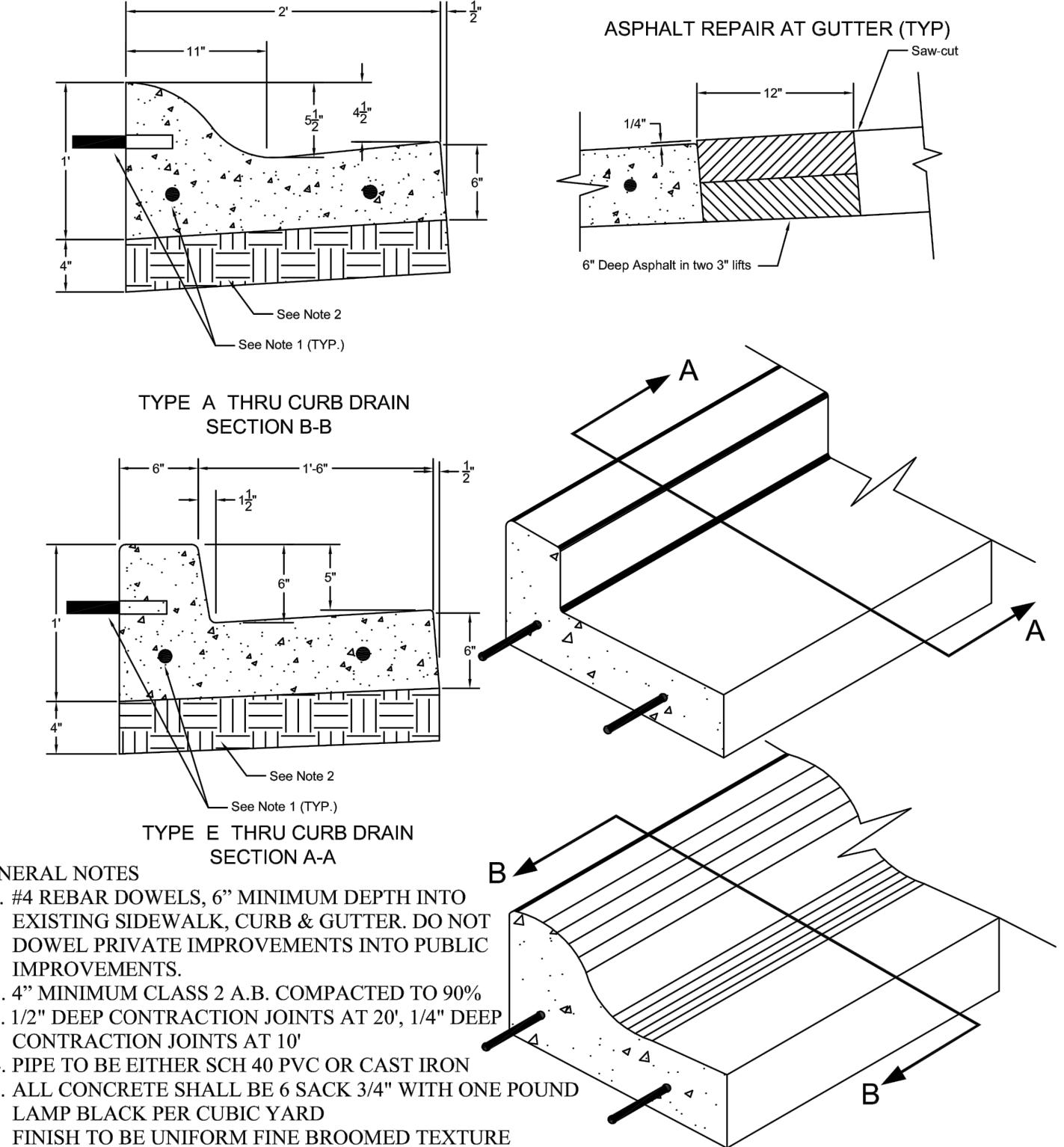
**GENERAL NOTES**

1. #4 REBAR DOWELS, 6" MINIMUM DEPTH INTO EXISTING SIDEWALK, CURB & GUTTER. DO NOT DOWEL PRIVATE IMPROVEMENTS INTO PUBLIC IMPROVEMENTS.
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5. DRIVEWAYS USING MATERIAL OTHER THAN ASPHALT OR NON TEXTURED CONCRETE MAY REQUIRE AN ADMINISTRATIVE PERMIT. CHECK WITH ENGINEERING.
6. ASPHALT TO BE HMA 1/2" FINE



**GENERAL NOTES**

1. #4 REBAR DOWELS, 6" MINIMUM DEPTH INTO EXISTING SIDEWALK, CURB & GUTTER. DO NOT DOWEL PRIVATE IMPROVEMENTS INTO PUBLIC IMPROVEMENTS.
2. 4" MINIMUM CLASS 2 A.B. COMPACTED TO 90%.
3. 1/2" DEEP CONTRACTION JOINTS AT 20', 1/4" DEEP CONTRACTION JOINTS AT 10'
4. PIPE TO BE EITHER SCH 40 PVC OR CAST IRON
5. ALL CONCRETE SHALL BE 6 SACK 3/4" WITH ONE POUND LAMP BLACK PER CUBIC YARD FINISH TO BE UNIFORM FINE BROODED TEXTURE
6. IF TYPE A CURB & GUTTER IS IN GOOD CONDITION, CONTRACTOR MAY CORE DRILL WITH ENGINEER APPROVAL.
7. ASPHALT TO BE HMA 1/2" FINE
8. UNLESS OTHERWISE NOTED, ALL RADII TO BE 1/2"



**GENERAL NOTES**

1. #4 REBAR DOWELS, 6" MINIMUM DEPTH INTO EXISTING SIDEWALK, CURB & GUTTER. DO NOT DOWEL PRIVATE IMPROVEMENTS INTO PUBLIC IMPROVEMENTS.
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6. IF TYPE A CURB & GUTTER IS IN GOOD CONDITION, CONTRACTOR MAY CORE DRILL WITH ENGINEER APPROVAL.
7. ASPHALT TO BE HMA 1/2" FINE
8. UNLESS OTHERWISE NOTED, ALL RADII TO BE 1/2"

**CITY OF BELMONT**  
DEPARTMENT OF PUBLIC WORKS  
DRIVEWAY  
WITH SIDEWALK

DWG No. \_\_\_\_\_  
APPROVED JAN 2013 NOT TO SCALE

DRIVEWAY APPROACH 1  
SCALE: NTS 19

**CITY OF BELMONT**  
DEPARTMENT OF PUBLIC WORKS  
CONCRETE CURB & GUTTER  
AT DRIVEWAY APPROACH

DWG No. \_\_\_\_\_  
APPROVED JAN 2013 NOT TO SCALE

DRIVEWAY APPROACH CURB 2  
SCALE: NTS 19

**CITY OF BELMONT**  
DEPARTMENT OF PUBLIC WORKS  
CURB, GUTTER  
AND SIDEWALK

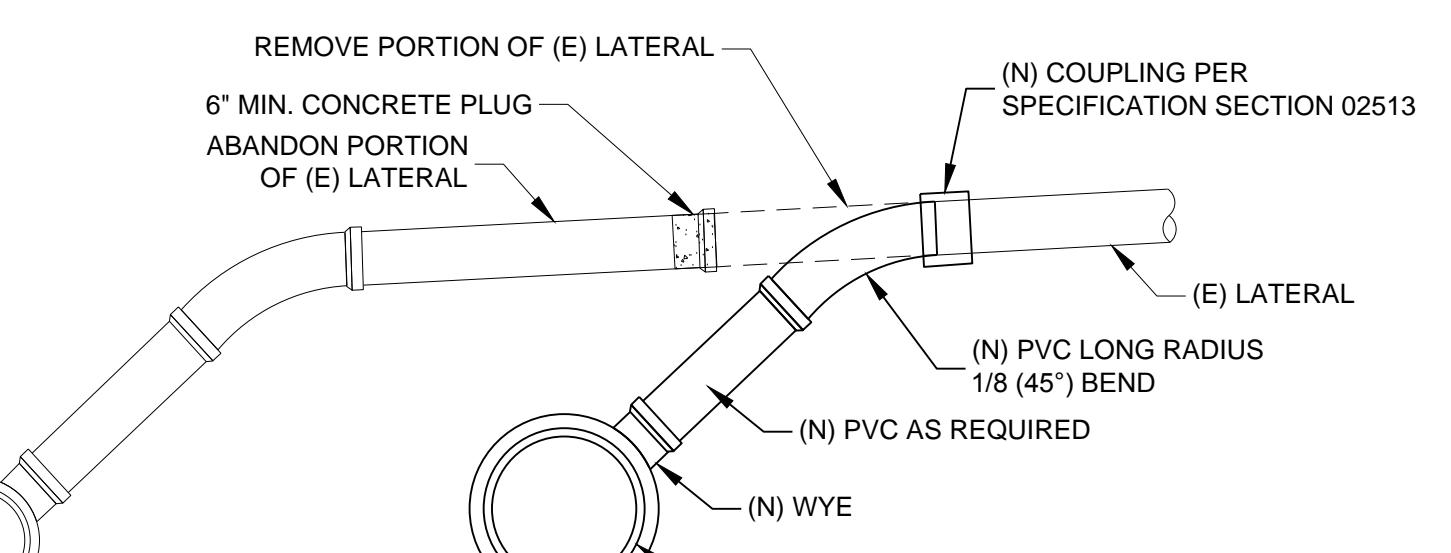
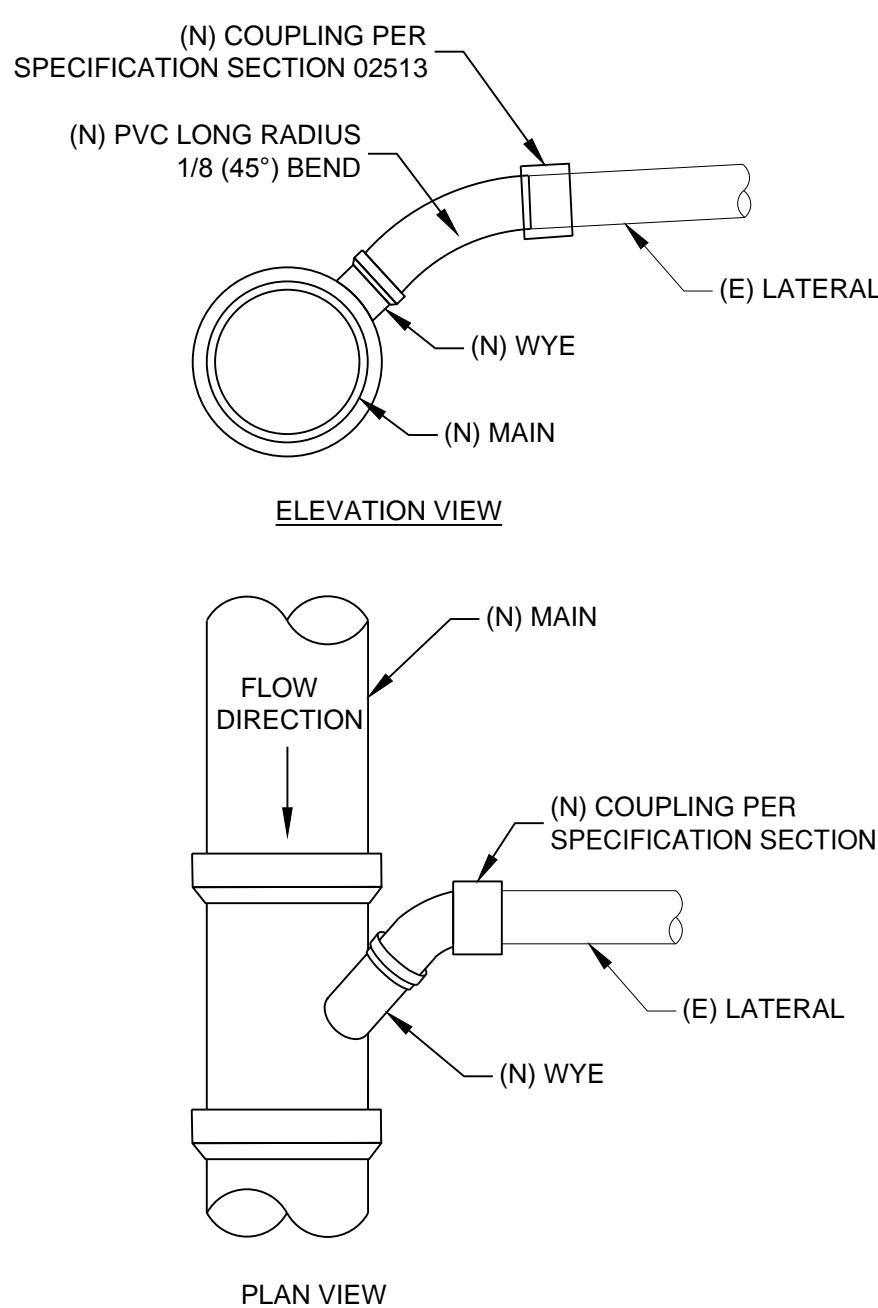
DWG No. \_\_\_\_\_  
APPROVED JAN 2013 NOT TO SCALE

CURB, GUTTER, & SIDEWALK 3  
SCALE: NTS 19

**CITY OF BELMONT**  
DEPARTMENT OF PUBLIC WORKS  
TYPE A & E CONCRETE  
CURB AND GUTTER

DWG No. \_\_\_\_\_  
APPROVED JAN 2013 NOT TO SCALE

CURB & GUTTER 4  
SCALE: NTS 19



**NOTES:**

1. REMOVE PORTION OF (E) LATERAL AS REQUIRED FOR INSTALLATION OF (N) PVC LATERAL PIPE/FITTINGS.
2. PLUG AND FILL ABANDONED PORTION OF LATERAL W/ SAND OR CDF CONFORMING TO THE REQUIREMENTS SET FORTH IN THE SPECIFICATIONS.

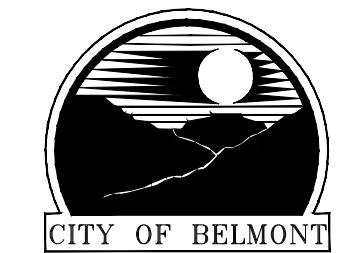
TRENCHED SEWER LATERAL 5  
SCALE: NTS 19

SEWER LATERAL 6  
SCALE: NTS 19

ABANDONED MANHOLE 7  
SCALE: NTS 19

LAMP HOLE 8  
SCALE: NTS 19

NO	REVISIONS	DATE	APPR
1	UTILITY LOCATION & UPPER LOCK	7/9/15	BLS
2	WATER SEPARATION	7/15/15	BLS
3			
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BELMONT, CALIFORNIA

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6/02/15

DEPT. OF PUBLIC WORKS CCN 2015-534  
2015 SEWER  
REHABILITATION PROJECT  
DETAILS

DATE: 5/29/15  
SCALE: AS SHOWN  
DESIGN: CLP  
DRAWN: CLP  
CHECKED: BLS

**SHEET**  
**19**  
OF  
**19**